This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

WEST

Help Logout

Main Menu | Search Form | Posting Counts | Show S Numbers | Edit S Numbers

Search Results - Record(s) 1 through 6 of 6 returned.

1. Document ID: JP 58021619 A

Entry 1 of 6

File: JPAB

Feb. 8, 1983

PUB-NO: JP358021619A

DOCUMENT-IDENTIFIER: JP 58021619 A

TITLE: CONCENTRATION OF EACH CONSTITUENT FROM CRUDE OR PURIFIED ORYZANOL

PUBN-DATE: February 8, 1983

INVENTOR-INFORMATION:

NAME

USUKI, NOBUYOSHI

INT-CL (IPC): A61K 35/78; A61K 31/575; C07J 9/00

ABSTRACT:

PURPOSE: A solvent that does not dissolve oryzanol is added to an organic solution of crude or purified oryzanol to effect partial precipitation, thus economically producing high-purity constituents used in medicines and cosmetics.

CONSTITUTION: Crude or purified oryzanol is dissolved in an organic solvent such as acetone and insoluble contaminants are separated and removed. Then, an organic solvent in which oryzanol is insoluble or hard soluble such as methanol is added, or an aqueous organic solvent or an appropriate amount of water is added to cause partial precipitation and each precipitate is collected. Oryzanol mainly occurs in rice bran oil and contains a mixture of ferulic esters of triterpene alcohols. Several components used as medicines, fungicide, cosmetics or the like are obtained in high yield as high-purity concentrates.

COPYRIGHT: (C)1983, JPO&Japio

Full Title Citation Front Review Classification Date Reference Claims KWC Image		******	V								
	Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Image

2. Document ID: JP 57149248 A

Entry 2 of 6

File: JPAB

Sep 14, 1982

PUB-NO: JP357149248A

DOCUMENT-IDENTIFIER: JP 57149248 A

TITLE: CYCLOARTENOL FERULIC ESTER, ONE COMPONENT OF ORYZANOL, HAVING ACTION CLOSELY RELATED TO PROPAGATION OF ANIMAL, PHARMACEUTICAL AND PHYSIOLOGICAL ACTION OF ORYZANOL

PUBN-DATE: September 14, 1982

INVENTOR-INFORMATION:

NAME

TSUCHIYA, TOMOTARO

INT-CL (IPC): C07C 69/734

ABSTRACT:

NEW MATERIAL: Cycloartenol ferulic ester.

USE: A drug having pharmaceutical and physioligical action of oryzanol, useful as a promotor for growth and an estrous agent for animal, a remedy for menopausal disorder or hepatic disorder, a cholesterin deposit inhibitor for the artery, having gonard stimulating effect. Further an antioxidant.

PROCESS: Residuary substances of <u>rice-bran oil</u> and soda oil are dissolved in a water-containing alcohol, acidified weakly with acetic acid, and extracted with an ether. The extracted solution is washed with 5wt% aqueous solution of potassium hydroxide, 3wt% aqueous solution of potassium carbonate, and 3wt% methanol-water solution of potassium hydroxide respectively, and decomposed with acetic acid to give a phenolic substance. This substance is then absorbed on alumina, and an elution fraction of ether and methanol (20:1) is collected, to give a raw <u>ferulic ester</u>, which is purified with 3wt% methanol-water solution of potassium hydroxide, to give the ferulic ester.

COPYRIGHT: (C) 1982, JPO&Japio

🖺 Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWC | Image

3. Document ID: JP 07216381 A

Entry 3 of 6

File: DWPI

Aug 15, 1995

DERWENT-ACC-NO: 1995-317772

DERWENT-WEEK: 199541

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Prepn. of edible oil rich in ferulic acid ester from raw <u>rice bran oil</u> - by simultaneously deoxidation and deodorisation of pretreated, raw <u>rice bran oil</u> in vacuum at high temp.

PRIORITY-DATA:

1994JP-0009878

January 31, 1994

PATENT-FAMILY:

PUB-NO PUB-DATE LANGUAGE PAGES MAIN-IPC

JP 07216381 A August 15, 1995 N/A 003 C11B003/14

INT-CL (IPC): A23 D 9/02; C11 B 3/14

ABSTRACTED-PUB-NO: JP07216381A

BASIC-ABSTRACT:

Prepn. of edible oil rich in ferulic acid esters, comprises simultaneous deoxidation and deodorisation of pretreated raw rice bran oil in vacuum at high temps. while blowing steam.

Pref. treatment is carried out in a deodorising appts. Pref. the raw oil has acid number of up to 20.

USE/ADVANTAGE - The oil is used e.g. as a salad oil. Method provides a nutritious and pure edible oil rich in the esters through a single process and is easily feasible with a simple appts. and east procedures.

In an example, a raw <u>rice bran oil</u> having an acid number of 10, a phospholipid content of 2 w.w%, a wax content of 3% and a content of <u>ferulic esters</u> of 1.7% was subjected to light acid purificn., dewaxing and bleaching and treated in a vacuum of 2 Torr in a deodorising appts. at 240 deg.C with amt. of steam blown of 3.5% for 60 mins. to obtain a deodorised pure oil of a light colour tone having acid value (measured with phenolphthalein indictor) of 1.5 and a ester content of 1.5%.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	lmage

4. Document ID: JP 06340889 A

Entry 4 of 6

File: DWPI

Dec 13, 1994

DERWENT-ACC-NO: 1995-063965

DERWENT-WEEK: 199509

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Prepn. of rice oil contg. large amts. of oryzanol(s) - by removing fatty acids from crude rice bran oil by steam distn. in absence of alkali

PRIORITY-DATA:

1993JP-0149783

May 31, 1993

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 06340889 A

December 13, 1994

N/A

004

C11B003/14

INT-CL (IPC): C11B 3/14

ABSTRACTED-PUB-NO: JP06340889A

BASIC-ABSTRACT:

Prepn. of oryzanol-enriched rice oil comprises removing fatty acids from crude rice bran oil through steam distn. in a vacuum without alkalis, such as NaOH to condense oryzanols. Pref. fatty acids are distilled away by blowing steam into the oil in a high vacuum at high temps. in a vacuum distilling appts. having a single-shell structure for evapn. sepn.

The alcohol of oryzanols, or <u>ferulic esters</u>, e.g. one or a mixt. of sterols and terpene alcohols. The purified process of crude <u>rice bran oil</u> typically consists of a degumming, a dewaxing, a decolouring, the steam distilling a decolouring, a low-temp. dewaxing and the steam distilling process. The distn. conditions are pref. 2-4 mmHg, 220 deg.C and an amt. of steam blown of 2-4 wt. % relative to amt. of the crude oil.

USE/ADVANTAGE - Without any alkali used in the purifying process, the method gives an edible rice oil contg. oryzanols in large amts. and having a good and natural

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image

5. Document ID: JP 54160400 A, JP 84045037 B

Entry 5 of 6

File: DWPI

Dec 19, 1979

DERWENT-ACC-NO: 1980-35200C

DERWENT-WEEK: 198020

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Recovering pure fatty acid <u>rice bran oil</u> residue - by decomposing <u>rice bran</u> oil alkali oil residue with sulphuric acid, washing, dehydrating and distilling

PRIORITY-DATA:

1978JP-0066817

June 5, 1978

PATENT-FAMILY:

 PUB-NO
 PUB-DATE
 LANGUAGE
 PAGES
 MAIN-IPC

 JP 54160400 A
 December 19, 1979
 N/A
 000
 N/A

 JP 84045037 B
 November 2, 1984
 N/A
 000
 N/A

INT-CL (IPC): C07C 67/48; C07C 69/76; C07J 9/00; C11B 3/04; C11B 13/02

ABSTRACTED-PUB-NO: JP54160400A

BASIC-ABSTRACT:

The method comprises decomposing the alkali oil residue obtd. from <u>rice bran oil</u> with H2SO4, opt. washing the crude fatty acid obtd. with H2O, washing the crude fatty acid with aq. soln. of water-soluble organic solvents until it is neutralised, dehydrating the prod., and distilling at <250 degrees C under reduced pressure.

Crude oryzanol is collected by extracting the residue with alkali-alcohol soln. and making the extract slightly acidic. Ferulic acid ester of sterol and ferulic acid esters of triterpene alcohols, is collected by treating the crude oryzanol with acetone to collect ferulic acid ester of sterol from the acetone-insol. portion and ferulic acid ester of triterpene alcohol from the acetone-soluble portion.

Oryzanol contg. large amt. of active principle. ferulic acid ester of cyclobranol, antiseptic and antimould agent and anti-acidification agent are obtd. in high yields.

Full Title Citation Front Review	Classification Date	Reference Claims	KWMC Image
----------------------------------	---------------------	------------------	--------------

6. Document ID: JP 71026345 B

Entry 6 of 6

File: DWPI

DERWENT-ACC-NO: 1971-50235S

DERWENT-WEEK: 197130

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Concentration of cyclobranol ferulatetranquillizer

PRIORITY-DATA:

1968JP-0009071

February 13, 1968

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 71026345 B

N/A

000

N/A

INT-CL (IPC): A61K 0/00; B01D 0/00; C07C 0/00

ABSTRACTED-PUB-NO: JP71026345B

BASIC-ABSTRACT:

Method is for condensing or isolating a new triterpene ferulate, cyclobranol ferulate. The objective ester is contained in <u>rice bran oil</u> at about 0.04%. Thus, the ratio of the new ester, w.r.t. the rice bran ferulates is only 1 to 3%.

As the raw material for the method there may be used conventional <u>ferulic ester</u> condensate pitch. The pitch is first treated with an alkaline methanol containing an equimolar amount of an alkali to remove sterol ferulates. Subsequently the pitch is extracted with an alkaline methanol contng. 1% of an alkali at room temperature or under heating. The extract is then adjusted with acid (e.g. acetic or HCl) to a weakly basic pH, i.e. pH 8. In this step, it is preferable to stop the neutralisation at pH 11 to 12 and to remove the precipitated impurities. After removal of the precipitate, the filtrate is further neutralised to pH 8. and the precipitates are collected by filtration. The thus obtained condensate contains the new ester.

	Terms		Documents
rice bran oil a	and ferulic ester		6
Dis	splay 20 Documents includ	ling document	number 6
	**************************************		Sopromountainount
	Display Format: REV	Change Form	nat
	Display Format: REV	Change Form	nat
NAME OF THE PROPERTY OF THE PR	Display Format: REV	Change Form	nat

Help Logout Main Menu Search Form Posting Counts Show S Numbers Edit S Numbers

Search Results - Record(s) 1 through 10 of 10 returned.

1. Document ID: US 5843499 A

Entry 1 of 10

File: USPT

Dec 1, 1998

US-PAT-NO: 5843499

DOCUMENT-IDENTIFIER: US 5843499 A

TITLE: Corn fiber oil its preparation and use

DATE-ISSUED: December 1, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moreau; Robert A.	Quakertown	PA	N/A	N/A
Hicks; Kevin B.	Malvern	PA	N/A	N/A
Nicolosi; Robert J.	Tyngsborough	MA	N/A	N/A
Norton; Robert A.	Peoria	IL	N/A	N/A

US-CL-CURRENT: $\frac{426}{2}$; $\frac{424}{439}$, $\frac{426}{417}$, $\frac{426}{482}$, $\frac{426}{489}$, $\frac{426}{492}$, $\frac{426}{611}$, $\frac{426}{11}$, $\frac{426}{1$

ABSTRACT:

An oil extractable from corn fiber contains ferulate esters, in particular sitostanyl ester, which has been shown to have cholesterol-lowering activity. The oil is extracted by a novel process which includes a grinding step carried out before extraction with an effective organic solvent such as hexane. The corn fiber oil may be combined with an ingestible and/or edible carrier for administration as a dietary supplement for cholesterol-lowering purposes.

16 Claims, 10 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 4

					-				
Full Titl	e Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image

Document ID: US 5814313 A

Entry 2 of 10

File: USPT

Sep 29, 1998

DOCUMENT-IDENTIFIER: US 5814313 A

TITLE: Thickened cosmetic emulsions

DATE-ISSUED: September 29, 1998

INVENTOR-INFORMATION:

CITY STATE ZIP CODE COUNTRY NAME Guilford CTSlavtcheff; Craig Stephen N/A N/A Gonzalez; Genaro Jaime Jiutepec N/A N/A MXX Mokati; Machitje Jerrey Durban N/A N/A ZAX

US-CL-CURRENT: 424/78.03; 424/78.02, 424/78.08, 514/844, 514/873, 514/937

ABSTRACT:

A cosmetic emulsion is provided which includes water, an oily emollient and a thickening/compatibilizing agent which is a polyether. The polyether is formed from the reaction of a copolymer of ethylene oxide with a C.sub.3 -C.sub.4 alkylene oxide and a C.sub.12 -C.sub.40 alpha-olefin epoxide or glycidyl ether. 3 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full Title Citation Front Review Classification Date Reference Claims KMC Image

3. Document ID: US 5660691 A

Entry 3 of 10

File: USPT

Aug 26, 1997

US-PAT-NO: 5660691

DOCUMENT-IDENTIFIER: US 5660691 A

TITLE: Process for the production of tocotrienol/tocopherol blend concentrates

DATE-ISSUED: August 26, 1997

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Barnicki; Scott Donald TN N/A N/A Kingsport Sumner, Jr.; Charles Edwan Kingsport TN N/A N/A Williams, III; Hampton Loyd Chip N/A N/A Kingsport TN

US-CL-CURRENT: 203/72; 203/28, 203/80, 549/413

ABSTRACT:

Disclosed is an improved process for the preparation of tocotrienol/tocopherol blend concentrates from vegetable oil distillates which are enriched in tocotrienols. Tocotrienol/tocopherol blend concentrates are obtained containing 20-80% tocotrienols/tocopherols by weight, with an overall recovery of tocotrienols/tocopherols of 72% to 97%. The process is comprised first of an esterification reaction where the more volatile alcohols are converted to their less volatile fatty acid esters, followed by a series of distillation steps where components boiling higher and lower than the tocotrienols/tocopherols are separated from tocotrienols/tocopherols and other like boiling substances. Advantages of the process are that tocotrienol/tocopherol blend concentrates are produced efficiently and economically in a minimum number of steps without the use of solvents and with a relatively small capital investment.

49 Claims, 2 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image

4. Document ID: US 5512691 A

Entry 4 of 10 File: USPT Apr 30, 1996

US-PAT-NO: 5512691

DOCUMENT-IDENTIFIER: US 5512691 A

TITLE: Process for the production of tocopherol concentrates

DATE-ISSUED: April 30, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Barnicki; Scott D.	Kingsport	TN	N/A	N/A
Sumner, Jr.; Charles E.	Kingsport	TN	N/A	N/A
Williams; H. Chip	Kingsport	TN	N/A	N/A

US-CL-CURRENT: 203/28; 203/34, 203/35, 203/38

ABSTRACT:

Disclosed is an improved process for the preparation of tocopherol concentrates from vegetable oil distillates. Tocopherol concentrates are obtained containing 20-80% tocopherol by weight, with an overall recovery of tocopherol of 72% to 97%. The process is comprised first of an esterification reaction where the more volatile alcohols are converted to their less volatile fatty acid esters, followed by a series of distillation steps where components boiling higher and lower than the tocopherols are separated from tocopherols and other like boiling substances. Advantages of the process are that tocopherol concentrates are produced efficiently and economically in a minimum number of steps without the use of solvents and with a relatively small capital investment.

47 Claims, 2 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 2

	*******				,		,			VI
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Image

5. Document ID: US 5219733 A

Entry 5 of 10

File: USPT

Jun 15, 1993

DOCUMENT-IDENTIFIER: US 5219733 A

TITLE: Process for preparing fatty acid esters

DATE-ISSUED: June 15, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Myojo; Katsunori	Kakogawa	N/A	N/A	JPX
Matsufune; Youichi	Kakogawa	N/A	N/A	JPX
Yoshikawa; Shiro	Ashiya	N/A	N/A	JPX

US-CL-CURRENT: $\frac{435}{52}$; $\frac{435}{134}$, $\frac{435}{135}$, $\frac{435}{136}$, $\frac{435}{176}$, $\frac{435}{177}$, $\frac{435}{196}$, $\frac{435}{197}$, $\frac{435}{198}$, $\frac{435$

ABSTRACT:

A process for reacting

- (1) a component selected from the group consisting of sterols and branched aliphatic primary or secondary alcohols having 14 to 32 carbon atoms, and
- (2) a component selected from the group consisting of fatty acids and fatty acid esters

in contact with an enzyme selected from the group consisting of lipase and cholesterol esterase or with the selected enzyme in an immobilized form, in a system selected from the group consisting of an aqueous medium and water-containing organic solvent to prepare a fatty acid ester of the component (1).

57 Claims, 11 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 11

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image

6. Document ID: US 5097012 A

Entry 6 of 10

File: USPT

Mar 17, 1992

DOCUMENT-IDENTIFIER: US 5097012 A

TITLE: Solvent extraction of fatty acid stream with liquid water and elevated

temperatures and pressures

DATE-ISSUED: March 17, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Thies; Mark C.	Clemson	sc	N/A	N/A
Mullins; Joseph C.	Clemson	sc	N/A	N/A
Briones; Jose A.	Clemson	SC	N/A	N/A

US-CL-CURRENT: 530/206; 530/207, 530/208, 530/209, 552/545, 554/175, 585/332

ABSTRACT:

A process for producing increased concentrations of valuable neutrals such as sterols and tocopherols from fatty and/or resin acid-containing streams, such as tall oil and vegetable oil distillate, employs liquid water at elevated temperatures and pressures. The neutrals are concentrated by extracting fatty acids as well as resin acids of high purity. Temperature-dependent solubility differences allow for the further separation of resin acids from fatty acids. 32 Claims, 5 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 5

Full Title Citation Front Review Classification Date Reference Claims KMC Image

7. Document ID: US 4981620 A

Entry 7 of 10 File: USPT

Jan 1, 1991

US-PAT-NO: 4981620

DOCUMENT-IDENTIFIER: US 4981620 A

TITLE: In-line dewaxing of edible vegetable oils

DATE-ISSUED: January 1, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Anghelescu; Aurelia	Livingston	NJ	N/A	N/A
Strecker; Leopold R.	Union	NJ	N/A	N/A
Winnie; George F.	Union	NJ	N/A	N/A

US-CL-CURRENT: <u>554/175</u>; <u>554/190</u>, <u>554/191</u>, <u>554/202</u>

ABSTRACT:

A method for the combined in-line bleaching and dewaxing of vegetable oils which includes the steps of bleaching the vegetable oil with a sufficient amount of bleaching clay and filter aid at a temperature of about 80.degree.-130.degree. C. for about 15-60 minutes, followed by rapid cooling of the bleached vegetable oil containing the bleaching clay, to a temperature of about 0.degree.-15.degree. C. for about 15 minutes-4 hours to thereby dewax the vegetable oil. The spent bleaching clay, waxy material and other impurities in the vegetable oil are then seaparted at low temperatures of about 0.degree.-20.degree. C., by such means as filtration, to thereby recover the bleached and dewaxed vegetable oil.

13 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full Title Citation Front Review Classification Date Reference Claims KWC Image

8. Document ID: US 4454329 A

Jun 12, 1984 Entry 8 of 10 File: USPT

US-PAT-NO: 4454329

DOCUMENT-IDENTIFIER: US 4454329 A

TITLE: Process for preparation of tocopherol concentrates

DATE-ISSUED: June 12, 1984

INVENTOR-INFORMATION:

STATE ZIP CODE COUNTRY NAME CITY Takagi; Yoshiaki N/A N/A JPX Kanagawa N/A JPX Kai; Yoshinori Kanagawa N/A

US-CL-CURRENT: 549/413

ABSTRACT:

A tocopherol concentrate having a high tocopherol concentration can be obtained in a high yield by subjecting a deodorized distillate formed as a by-product at the step of deodorizing oils and fats to esterification of free fatty acids by addition of an alcohol or removal of free fatty acids by distillation and then to hydrogenation. A tocopherol concentrate can also be obtained by subjecting a deodorized distillate to esterification by addition of a polyhydric alcohol and then to distillation. Concentrates having a high concentration and a high quality can be obtained in a high yield with a good operation efficiency. 2 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------

Document ID: US 5660691 A

Entry 9 of 10

File: DWPI

Aug 26, 1997

DERWENT-ACC-NO: 1997-434294

DERWENT-WEEK: 199740

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Tocotrienol-tocopherol blend concentrate production - from vegetable oil by-product by thermal esterification and multi-stage distillation, used for

production of pure vitamin E

INVENTOR: BARNICKI, S D; SUMNER, C E; WILLIAMS, H L C

PRIORITY-DATA:

1995US-0558073

November 13, 1995

PATENT-FAMILY:

 PUB-NO
 PUB-DATE
 LANGUAGE
 PAGES
 MAIN-IPC

 US 5660691 A
 August 26, 1997
 N/A
 012
 C07D311/76

INT-CL (IPC): $\underline{\text{C07}} \ \underline{\text{D}} \ 311/\underline{76}$

ABSTRACTED-PUB-NO: US 5660691A

BASIC-ABSTRACT:

Preparation of a tocotrienol (TT)/tocopherol (TP) blend concentrate (I) involves (a) heating a vegetable oil by-product (II), optionally in presence of an acid catalyst and/or additional 10-22C fatty acids, to 70-300 (preferably 150-230) deg. C under a pressure of 50-760 (preferably 100-200) Torr, with continuous removal of water formed, to give a mixture (III), (b) subjecting (III) to one or more distillations at 200-300 deg. C and 0.01-10 Torr in series and (c) subjecting the liquid effluent from step (b) to one or more distillations at 170-270 deg. C and 0.005-2 Torr in series. (II) contains TT, TP, fatty acids, hydrocarbons, fatty acid sterol esters, sterols, triterpenoid alcohols, methyl-sterols and mono-, diand triglycerides. The weight ratio of TT to TP in (II) is 0.5-10:1. (III) contains sterol esters, high boiling fatty acid esters, waxes and glycerides. In step (b) a vapour effluent comprising unreacted fatty acids and low-boiling components and a liquid effluent comprising TT and TP are removed. In step (c) a liquid effluent containing sterol esters, fatty acid esters, glycerides, waxes and other high-boiling components and a vapour effluent comprising (I) are removed.

USE - (I) is useful for production of high purity vitamin E and other tocopherol antioxidants. TT and TP help to prevent oxidation and spoilage of vegetable oils, and TT also has hypercholesterolaemic effect. The process is useful for recovery of (I) from vegetable oil by-products from sources (e.g. <u>rice bran oil</u> and palm oil) having relatively high TP and TT content.

ADVANTAGE - (I) are obtained containing 20-80 wt.% TT/TP, with overall TT/TP recovery of 72-97%. (I) are produced efficiently and economically in a minimum number of steps, without use of solvents and with a relatively small capital investment. Esterification step (a) converts the more volatile alcohols into their less volatile fatty acid esters.

Full Title Citation Front Review Classification Date Reference Claims KWC Image

10. Document ID: JP 68027323 B

Entry 10 of 10

File: DWPI

DERWENT-ACC-NO: 1966-35182F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD TITLE: Triterpene esters of ferulic acid

PRIORITY-DATA:

1965JP-0065839

October 27, 1965

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 68027323 B

N/A

000

N/A

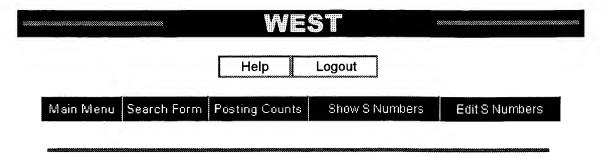
ABSTRACTED-PUB-NO: JP68027323B

BASIC-ABSTRACT:

Separating triterpene esters of ferulic acid from rice bran oil.

The separation of the triterpene esters from the <u>sterol esters</u> is based on the difference in the ease of saponification of the two ester groups. The presence of a C4 Me group in the triterpene esters reduces the ease of saponification. Oryzanol in lower alcoholic soln. contg. alkalies is heated to saponify the <u>sterol esters</u> and the mixture is then acidified when the triterpene esters crystallise. The amount of alkali required for saponification is 1-3 mols per mol of <u>sterol ester</u>, the mol. wt. of which or of the oryzanol may be taken as 600. The alkali concn. is 0.1-1N and saponification is for 2-4 hrs.

***************************************	Documents
rice bran oil and sterol ester	1
<u>Display Format</u> :	warranness and the second seco



Search Results - Record(s) 1 through 20 of 72 returned.

1. Document ID: US 5985344 A

Entry 1 of 72

File: USPT

Nov 16, 1999

US-PAT-NO: 5985344

DOCUMENT-IDENTIFIER: US 5985344 A

TITLE: Process for obtaining micronutrient enriched rice bran oil

DATE-ISSUED: November 16, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cherukuri; Reddy Sastry V.	Folsom	CA	N/A	N/A
Cheruvanky; Rukmini	Folsom	CA	N/A	N/A
Lynch; Ike	Dillon	MT	N/A	N/A
McPeak; Daniel L.	El Dorado Hills	CA	N/A	N/A

US-CL-CURRENT: <u>426/417</u>; <u>426/430</u>, <u>426/492</u>, <u>426/493</u>, <u>426/494</u>, <u>554/12</u>

ABSTRACT:

A simple and cost effective enrichment process for enhancing antioxidant content of rice bran oil from crude rice bran oil (CrRBO) is described. The process comprises extracting the CrRBO using alcohol at 25-77.degree. C., obtaining the enriched rice bran oil (ERBO) from alcohol extracts which contain 74 to 300 percent more antioxidants than the starting CrRBO. The anti-oxidant enriched rice bran oil is useful in pharmaceutical, therapeutic, and dietary preparations.

32 Claims, 2 Drawing figures

Exemplary Claim Number: 1 Number of Drawing Sheets: 2

							Later and the second second			
E	T:44 -	Citation i	Eccat	Danisan	Classification	To make	Distance	C1=:	144640	lere en en e
run :	11112	U REKOULE		1 P. M. O. IM. (1970)	L I assincation	Date	Reference	L LE IIIIS I	I NOUL I	

2. Document ID: US 5962062 A

Entry 2 of 72

File: USPT

Oct 5, 1999

DOCUMENT-IDENTIFIER: US 5962062 A

TITLE: Dietetically balanced milk product

DATE-ISSUED: October 5, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Carrie; Anne-Lise	Vevey	N/A	N/A	CHX
Fern; Edward	Blonay	N/A	N/A	CHX
Fleith; Mathilde	La Tour-de-Peilz	N/A	N/A	CHX
Malnoe; Armand	Dommartin	N/A	N/A	CHX
Vikas; Martin	Konolfingen	N/A	N/A	CHX

US-CL-CURRENT: 426/585; 426/580, 426/601, 426/72, 426/74, 426/800, 426/801

ABSTRACT:

A milk having a formulated lipid composition wherein the lipids are lipids of lactic and vegetable origin which are, by weight, (i) from 30% to 40% milk fat lipids, (ii) from 30% to 40% of a first oil substance which have an oleic acid content in an amount greater than 60%, and (iii) from 1% to 30% of oil substance which provide n-3 and n-6 polyunsaturated fatty acids and so that triglyceride fatty acids of the lipids comprise 20% to 40% saturated fatty acids of lactic origin, 35% to 60% monounsaturated fatty acids, and 15% to 30% of n-3 and n-6 polyunsaturated in a ratio of n-6 to n-3 fatty acids of from 5:1 to 10:1.

17 Claims, 0 Drawing figures
Exemplary Claim Number: 1

							process in a service of the service of Africans	-		,
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	image

3. Document ID: US 5869708 A

Entry 3 of 72

File: USPT

Feb 9, 1999

DOCUMENT-IDENTIFIER: US 5869708 A

TITLE: Process for the isolation of oryzanols from crude dark acid oil (rice bran)

DATE-ISSUED: February 9, 1999

INVENTOR-INFORMATION:

ZIP NAME CITY STATE COUNTRY CODE

Das; Prashanta Andra INX N/A N/A Kumar Pradesh

Andra Chaudhuri; Arabinda N/A N/A INX Pradesh

Kaimal;

TNY Andra Andra Thengumpillil N/A N/A N/A N/A INX Pradesh Balagopala Pradesh

Narayana

Bhalerao; Uday Triambakaraj

US-CL-CURRENT: 552/510

ABSTRACT:

A process for the isolation of oryzanols from crude dark acid oil (rice bran) which comprises (a) distilling the free fatty acids from crude dark acid oil by conventional methods, (b) hydrolyzing the resultant residue by conventional methods, (c) dissolving the hydrolyzed product in water to form oryzanol containing micellar aggregates and adding dropwise aqueous solution of calcium chloride to form precipitate, (d) extracting the <u>oryzanols</u> from dried precipitate with polar organic solvent and if desired (e) purifying the <u>oryzanols</u> from the organic extract by column chromatography. 5 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Title Citation Front Review Classification Date Reference Claims KWC Image

Document ID: US 5817299 A

Entry 4 of 72 File: USPT Oct 6, 1998

US-PAT-NO: 5817299

DOCUMENT-IDENTIFIER: US 5817299 A

TITLE: Non-chemical sunscreen composition

DATE-ISSUED: October 6, 1998

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Manirazman; Abul M. Port Jefferson N/A N/A

US-CL-CURRENT: 424/59; 424/195.1, 424/400, 424/401

ABSTRACT:

The present invention relates to nonchemical sunscreen composition comprising as its active components, in synergistically effective amounts, a plant extract containing at least about 50% by weight of proanthocyanidins, .gamma.-oryzanol, ferulic acid and/or an ester thereof, titanium dioxide and optionally, Scutellaria

29 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full Title Citation Front Review Classification Date Reference Claims

Document ID: US 5853705 A

Entry 5 of 72

File: USPT

Dec 29, 1998

US-PAT-NO: 5853705

DOCUMENT-IDENTIFIER: US 5853705 A

TITLE: Anti-aging cosmetic composition

DATE-ISSUED: December 29, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Nakayama; Yasukazu	Yokohama	N/A	N/A	JPX
Nishiyama; Shoji	Yokohama	N/A	N/A	JPX
Shimatani; Yoichi	Tokyo	N/A	N/A	JPX
Sawaki; Shigetoyo	Osaka	N/A	N/A	JPX
Yamada; Katsuhisa	Osaka	N/A	N/A	JPX
Naitoh; Kazufumi	Osaka	N/A	N/A	JPX

US-CL-CURRENT: 424/59; 424/401, 424/94.63, 424/94.64, 424/94.65, 424/94.66

ABSTRACT:

An anti-aging cosmetic composition in which is blended an enzymolyzed substance obtained by treating by one or more enzymes an alkali extract of a hypoallergenic rice obtained by treating rice in advance with a proteinase and, preferably, a UV protective agent.

protective agent.

19 Claims, 7 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 7

Full	Title	Citation	Front	Review	Classification	Date	Poterance	Claime	1/3080	Inches and
1 444	1111	- Charlott	LIVIL	DE ALEAN	Ciassilication	Vale	Indiciditye :		15,000 C	i iliieke i

Document ID: US 5843499 A

Entry 6 of 72

File: USPT

Dec 1, 1998

DOCUMENT-IDENTIFIER: US 5843499 A

TITLE: Corn fiber oil its preparation and use

DATE-ISSUED: December 1, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moreau; Robert A.	Quakertown	PA	N/A	N/A
Hicks; Kevin B.	Malvern	PA	N/A	N/A
Nicolosi; Robert J.	Tyngsborough	MA	N/A	N/A
Norton; Robert A.	Peoria	IL	N/A	N/A

US-CL-CURRENT: 426/2; 424/439, 426/417, 426/482, 426/489, 426/492, 426/611, 554/11, 554/12, 554/8, 554/9

ABSTRACT:

An oil extractable from corn fiber contains ferulate esters, in particular sitostanyl ester, which has been shown to have cholesterol-lowering activity. The oil is extracted by a novel process which includes a grinding step carried out before extraction with an effective organic solvent such as hexane. The corn fiber oil may be combined with an ingestible and/or edible carrier for administration as a dietary supplement for cholesterol-lowering purposes.

16 Claims, 10 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 4

Fuli	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWAC	Image

7. Document ID: US 5849272 A

Entry 7 of 72

File: USPT

Dec 15, 1998

DOCUMENT-IDENTIFIER: US 5849272 A

TITLE: Ultraviolet absorbing composition

DATE-ISSUED: December 15, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baba; Katsuya	Yokohama	N/A	N/A	JPX
Yabu; Toshihito	Yokohama	N/A	N/A	JPX
Nishiyama; Shoji	Yokohama	N/A	N/A	JPX
Ito; Kenzo	Yokohama	N/A	N/A	JPX

US-CL-CURRENT: 424/59; 424/401, 514/844, 514/845, 514/846

ABSTRACT:

The ultraviolet absorbing composition in accordance with the present invention comprises the following ingredients (A) and (B):

- (A) 4-tert-butyl-4'-methoxydibenzoylmethane; and
- (B) a diester which is liquid at 20.degree. C. and has a structure represented by the following general formula (1):

R.sub.1 OOC--(CH.sub.2)n--COOR.sub.2 (1)

wherein each of R.sub.1 and R.sub.2 is an alkyl group, an alkenyl group, a hydroxyalkyl group, or a hydroxyalkenyl group each having 1 to 19 carbon atoms, and n is an integer of 0 to 6. In the present invention, crystals of (A) are prevented from depositing by using a diester of (B) togetherwith and an ultraviolet absorbing composition in which (A) can be stably compounded in a high concentration and which exhibits excellent feel of use and safety can be obtained thereby.

5 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Image

Document ID: US 5776438 A

Entry 8 of 72

File: USPT

Jul 7, 1998

DOCUMENT-IDENTIFIER: US 5776438 A

TITLE: External preparation

DATE-ISSUED: July 7, 1998

INVENTOR-INFORMATION:

CITY STATE ZIP CODE COUNTRY NAME Tokue; Wataru Yokohama N/A N/A JPX Ito; Kenzo Yokohama N/A N/AJPX JPX N/A Tominaga; Naoki Tokyo N/A

US-CL-CURRENT: 424/59; 424/401, 424/70.9, 514/148, 514/454

ABSTRACT:

An external preparation containing DL-.alpha.-tocopherol 2- L-ascorbic phosphoric diester and/or a salt thereof, and at least one ultraviolet absorbing agent. The cross-linking of collagen is suppressed and an excellent cutaneous aging resisting effect is obtained.

11 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full Title Citation Front Review Classification Date Reference	Claims	KMC	Image

Document ID: US 5753242 A

Entry 9 of 72

File: USPT

May 19, 1998

US-PAT-NO: 5753242

DOCUMENT-IDENTIFIER: US 5753242 A

TITLE: External skin treatment composition

DATE-ISSUED: May 19, 1998

INVENTOR-INFORMATION:

STATE ZIP CODE COUNTRY NAME CITY Yokohama Nakamura; Fumiaki N/A N/A JPX Kumano; Yoshimaru Yokohama N/A N/A JPX Ito; Kenzo N/A JPX Yokohama N/A

US-CL-CURRENT: 424/401; 514/844

ABSTRACT:

An external skin treatment composition comprising erythritol, hydrogenated lecithin, and a polyoxyethylene-added cholesterol derivative, which is superior in prevention and improvement of skin roughness, with little sticky feeling, with quick absorption into the skin, and superior in the softening effect on the corneum.

12 Claims, 1 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 1

Full Title Citation From	t Keview Lilassification	i Date i Keterence i l	Claimsii Küülü I Imade i

10. Document ID: US 5747049 A

Entry 10 of 72

File: USPT

May 5, 1998

DOCUMENT-IDENTIFIER: US 5747049 A

TITLE: Cosmetic composition

DATE-ISSUED: May 5, 1998

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Tominaga; Naoki Kanagawa N/A N/A JPX

US-CL-CURRENT: 424/401; 424/59, 514/844, 514/846

ABSTRACT:

An anti-aging preparation for cutaneous application which prevents cutaneous aging, a collagen cross-linking inhibitory preparation for cutaneous application which inhibits collagen cross-linking occurring predominantly in the dermis to maintain skin elasticity and to prevent wrinkles or sagging, and an anti-UV preparation for cutaneous application which protects the skin from harmful effects caused by of excessive exposure to ultraviolet rays of sunlight are disclosed. The preparation contains one or two aminoethyl compounds represented by formula (I):

NH.sub.2 CH.sub.2 CH.sub.2 X (I)

wherein X represents --SO.sub.2 H or --SO.sub.2 SH, and preferably contains at least one ultraviolet protective agent.
21 Claims, 0 Drawing figures
Exemplary Claim Number: 1,2,3

Full Title Citation Front Review Classification Date Reference Claims KMC Image

11. Document ID: US 5744145 A

Entry 11 of 72

File: USPT

Apr 28, 1998

DOCUMENT-IDENTIFIER: US 5744145 A

TITLE: Preparation of lipid compositions for cosmetic products

DATE-ISSUED: April 28, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bertoli; Constantin	Romanel S/Lausanne	N/A	N/A	CHX
Bracco; Umberto	Vevey	N/A	N/A	CHX
Delvecchio; Angiolino	Taverne	N/A	N/A	CHX
Malnoe; Armand	Givrins	N/A	N/A	CHX

US-CL-CURRENT: 424/401; 426/417, 426/476, 426/487, 426/488, 426/492, 426/601

ABSTRACT:

Oil mixtures, which provide lipid compositions for restraining skin degeneration, contain, by weight, 30% to 50% <u>rice bran oil</u> and 15% to 25% sesame oil and also contain additional oil, which includes in particular, oil from among maize oil, wheat germ oil and sunflower oil, so that the composition contains linoleic acid and contains vitamin E for protecting the composition against oxidation, the composition being prepared from oils containing gum, color and odor which are subjected to degumming, decoloring and deodorizing, the deodorizing being carried out under conditions of temperature and vacuum so that the composition has at least 2% by weight unsaponifiable oil matter and particularly from 2% to 3% unsaponifiable oil matter.

13 Claims, 0 Drawing figures Exemplary Claim Number: 1

	Full Title Citation Front	Review Classification	Date Reference Claims	KWIC Image
--	---------------------------	-----------------------	-----------------------	------------

12. Document ID: US 5658578 A

Entry 12 of 72

File: USPT

Aug 19, 1997

US-PAT-NO: 5658578

DOCUMENT-IDENTIFIER: US 5658578 A

TITLE: Cosmetic composition

DATE-ISSUED: August 19, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ogawa; Haruo	Kanagawa	N/A	N/A	JPX
Nishiyama; Shoji	Kanagawa	N/A	N/A	JPX
Ito; Kenzo	Kanagawa	N/A	N/A	JPX

US-CL-CURRENT: $\underline{424}/\underline{401}$; $\underline{514}/\underline{844}$, $\underline{514}/\underline{847}$, $\underline{514}/\underline{944}$

ABSTRACT:

A preparation for external application to the skin which comprises disodium adenosine triphosphate and tranexamic acid for prevention of skin roughening and skin improvement. The preparation further contains ginseng extract.
4 Claims, 0 Drawing figures
Exemplary Claim Number: 1

Full	Title	Citation Front	Review	Classification	Date	Reference	Claims	KAMC	Image

13. Document ID: US 5653966 A

Entry 13 of 72 File: USPT Aug 5, 1997

US-PAT-NO: 5653966

DOCUMENT-IDENTIFIER: US 5653966 A

TITLE: Lipid composition for cosmetic products

DATE-ISSUED: August 5, 1997

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY
Bertoli; Constantin Lausanne N/A N/A CHX
Malnoe; Armand Dommartin N/A N/A CHX

US-CL-CURRENT: 424/69; 426/417

ABSTRACT:

A lipid composition for preparation of cosmetic compositions is provided by a mixture of, by weight based upon a weight of the lipid composition, from 40% to 60% apricot kernel oil, from 10% to 20% of an oil containing palmitoleic acid, from 15% to 25% of olive oil and from 20% to 30% of <u>rice bran oil</u> or sesame oil or combinations thereof. Cosmetic compositions containing the lipid mixture may be anhydrous or contain water. The preparation of the lipid composition may include treating the mixture of oils with steam at a temperature of about 180.degree. C. for about 3 hours at a rate of about 1% per hour and under a vacuum of about 1 mbar to 2 mbar for deodorizing the oils.

File: USPT

31 Claims, 0 Drawing figures Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image	
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------	--

14. Document ID: US 5552167 A

Entry 14 of 72

US-PAT-NO: 5552167

DOCUMENT-IDENTIFIER: US 5552167 A

TITLE: Rice bran oil antioxidant

DATE-ISSUED: September 3, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Taylor; James B.	Sparta	NJ	N/A	N/A
Richar; Thomas M.	Long Valley	NJ.	N/A	N/A
Wilhelm; Carolyn L.	Hackettstown	NJ	N/A	N/A
Chrysam; Michael M.	Blairstown	`NJ	N/A	N/A
Otterburn; Michael	Randolph	ŊĴ	N/A	N/A
Leveille; Gilbert A.	Denville	ŊĴ	N/A	N/A

US-CL-CURRENT: 426/99; 426/302, 426/542

ABSTRACT:

High linolenic edible oils such as soybean oil and canola are stabilized by blending the oils with <u>rice bran oil</u> in amounts effective to render the oils stable to oxidation. Preferred embodiments employ from about 0.5% to about 10%, more narrowly from about 2% to about 5%, by weight <u>rice bran oil</u> specially processed to retain unsaponifiable matter. In one embodiment, physically refined <u>rice bran oil</u> is used. The natural stabilized oil is especially useful as a spray oil for crackers, nuts, chips, and other snack products.

18 Claims, 0 Drawing figures Exemplary Claim Number: 1

Sep 3, 1996

Full Title Citation Front Review Classification Date Reference Claims KWC Image

15. Document ID: US 5545414 A

Entry 15 of 72

File: USPT

Aug 13, 1996

US-PAT-NO: 5545414

DOCUMENT-IDENTIFIER: US 5545414 A

TITLE: Cholesterol lowering food product

DATE-ISSUED: August 13, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Behr; Stephen R.	Westerville	OH	N/A	N/A
Seeds; Jeffrey K.	Pickerington	OH	N/A	N/A
Lamb; Catherine S.	Westerville	ОН	N/A	N/A
Garleb; Keith A.	Powell	ОН	N/A	N/A
Walton; Joseph E.	Westerville	ОН	N/A	N/A

US-CL-CURRENT: 424/484; 424/485, 424/488, 424/490, 424/491, 424/493, 424/499, 514/824

ABSTRACT:

A nutritional product having a solid matrix containing protein, fat and carbohydrate has disposed therein particles of dietary fiber encapsulated in zein. The preferred dietary fiber is guar. Such a nutritional product may be used for reducing the serum cholesterol in a mammal.

19 Claims, 0 Drawing figures

Exemplary Claim Number: 1

777777777777777777777777777777777777777						***************************************		***************************************		
Entl	T:41 -	Chatine	Ceret	Davis	Classification	Danks	Deference	Claire	1/30/50	les-a-
4.21	HUE	CHARIOII	FIGHE	Mediann	Classification	Date	Reference	Clanns	RADIC	mage :

16. Document ID: US 5514398 A

Entry 16 of 72

File: USPT

May 7, 1996

DOCUMENT-IDENTIFIER: US 5514398 A

TITLE: Food additive and use thereof

DATE-ISSUED: May 7, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Imai; Yutaka	Aichi	N/A	N/A	JPX
Ogawa; Tomonari	Aichi	N/A	N/A	JPX
Tsurumi; Chiho	Aichi	N/A	N/A	JPX
Kitagawa; Masatoshi	Aichi	N/A	N/A	JPX
Tanaka; Hidero	Aichi	N/A	N/A	JPX

US-CL-CURRENT: 426/271; 426/601, 426/605

ABSTRACT:

An additive for cholesterol-containing food, containing a rice bran component and/or a derivative thereof as an active ingredient, a method of using same, and food treated thereby; and a process for producing mayonnaise controlled in the rise of a blood cholesterol level, or the absorption of cholesterol. A method of decreasing the effect of cholesterol contained in food on a living organism, for example, controlling the rise of a blood cholesterol level by adding to cholesterol-containing food a food additive capable of forming a complex with cholesterol, such as an extract of a rice bran component, .gamma.-orizanol (.gamma.-OZ) which is a mixture of esters of ferulic acid with various alcohols prepared by refining said extract and/or a derivative of a rice bran component, thereby forming a cholesterol complex of the food additive, whereby the cholesterol contained in food becomes nonabsorbable by a living organism or can be removed therefrom.

3 Claims, 16 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 16

		-144	***************************************							
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	lmage

17. Document ID: US 5478560 A

Entry 17 of 72

File: USPT

Dec 26, 1995

US-PAT-NO: 5478560

DOCUMENT-IDENTIFIER: US 5478560 A

TITLE: External dermatological composition

DATE-ISSUED: December 26, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tominaga; Naoki	Yokohama	N/A	N/A	JPX
Kenzo; Ito	Yokohama	N/A	N/A	JPX
Kumano; Yoshimaru	Yokohama	N/A	N/A	JPX

US-CL-CURRENT: 424/401; 514/2, 514/847

ABSTRACT:

An external dermatological composition comprising a salt of L-arginine-L-aspartic acid and a pharmacologically acceptable carrier therefor.
4 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full Title Citation Front Review Classification Date Reference Claims KWIC Image

18. Document ID: US 5415875 A

Entry 18 of 72

File: USPT

May 16, 1995

US-PAT-NO: 5415875

DOCUMENT-IDENTIFIER: US 5415875 A

TITLE: Anti-peroxide external preparation for skin

DATE-ISSUED: May 16, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kakoki; Hiroyuki	Yokohama	N/A	N/A	JPX
Kono; Yoshiyuki	Yokohama	N/A	N/A	JPX
Funatsu; Shinichiro	Yokohama	N/A	N/A	JPX
Komatsu; Masaaki	Yokohama	N/A	N/A	JPX

US-CL-CURRENT: $\frac{424}{581}$; $\frac{424}{401}$, $\frac{424}{45}$, $\frac{514}{458}$, $\frac{514}{828}$, $\frac{514}{844}$, $\frac{514}{846}$, $\frac{514}{887}$, $\frac{514}{937}$, $\frac{514}{938}$, $\frac{514}{969}$

ABSTRACT:

An anti-peroxide external preparation for skin comprising: decomposition product of shell membrane: and tocopherol and/or derivatives thereof. It is possible to suppress formation of peroxide and remove it.

2 Claims, 4 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 2

*****************		***************************************							***************************************	
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image

19. Document ID: US 5407677 A

Entry 19 of 72

File: USPT

Apr 18, 1995

US-PAT-NO: 5407677

DOCUMENT-IDENTIFIER: US 5407677 A

TITLE: Invigorating herbal gel for supple skin

DATE-ISSUED: April 18, 1995

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Tominaga; Naoki Yokohama N/A N/A JPX Yoshioka; Toshio Zushi N/A N/A JPX

US-CL-CURRENT: 424/401; 424/195.1, 514/937, 514/938

ABSTRACT:

An herbal composition for the body is provided which promotes lipid metabolism by increasing the activity of a lipid metabolism enzyme in the body, and which has a weight reducing effect. The composition contains at least one component selected from fennel extract, inositol and dextrane sulfate.

This composition is preferably employed in the form of an invigorating herbal gel for supple skin which is effective in increasing lipase activity and thus accelerating lipid metabolism.

2 Claims, 0 Drawing figures Exemplary Claim Number: 1

Front Review Classification Date Reference Claims

20. Document ID: US 5286476 A

Entry 20 of 72

File: USPT

Feb 15, 1994

US-PAT-NO: 5286476

DOCUMENT-IDENTIFIER: US 5286476 A

TITLE: Hair cosmetic composition

DATE-ISSUED: February 15, 1994

INVENTOR-INFORMATION:

NAME	CITY	. STATE	ZIP CODE	COUNTRY
Nanba; Tomiyuki	Yokohama	N/A	N/A	JPX
Torii; Kenji	Yokohama	N/A	N/A	JPX
Yasuhara; Hiroaki	Yokohama	N/A	N/A	JPX
Tomita; Kenichi	Yokohama	N/A	N/A	JPX
Fukuchi; Yoko	Yokohama	N/A	N/A	JPX

US-CL-CURRENT: 424/47; 424/63, 424/70.12

ABSTRACT:

A hair cosmetic composition contains one or more high molecular weight silicone compounds having the formula (I): ##STR1## wherein R.sub.1 represents a methyl group or a part thereof represents a phenyl group, R.sub.2 represents a methyl or hydroxy group, and n represents an integer of 3,000 to 20,000. 10 Claims, 0 Drawing figures Exemplary Claim Number: 1

Citation Front Review Classification Date Reference Claims

Terms	Documents
ll and oryzanol	72

Display 20 Documents

including document number 21

Display Format: REV

Change Format

Main Menu Search Form Posting Counts Show S Numbers Edit S Numbers Help Logout

Help Logout Main Menu Search Form Posting Counts Show 8 Numbers Edit 8 Numbers

Search Results - Record(s) 21 through 40 of 72 returned.

21. Document ID: US 5084289 A

Entry 21 of 72

File: USPT

Jan 28, 1992

US-PAT-NO: 5084289

DOCUMENT-IDENTIFIER: US 5084289 A

TITLE: Method for the inhibition of oxidation of edible oils utilizing a fat soluble anti-oxidant and a water soluble anti-oxdant in a reverse micelle system

DATE-ISSUED: January 28, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shin; Hyun-Kyung	Seoul	N/A	N/A	KRX
Han; Dae-Seok	Seoul	N/A	N/A	KRX
Yi; Ock-Sook	Seoul	N/A	N/A	KRX

US-CL-CURRENT: 426/330.6; 424/439, 426/541, 514/844

ABSTRACT:

A method for inhibiting the oxidation of edible oils and fats by forming a reverse micelle by admixing a mixture of an aqueous solution containing a water-soluble antioxidant with a surfactant and said oils or fats.

20 Claims, 2 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	lmage

22. Document ID: JP 06340889 A

Entry 22 of 72

File: JPAB

Dec 13, 1994

PUB-NO: JP406340889A

DOCUMENT-IDENTIFIER: JP 06340889 A

TITLE: PRODUCTION OF ORYZANOL-RICH RICE BRAN OIL

PUBN-DATE: December 13, 1994

INVENTOR-INFORMATION:

NAME

ICHIMATSU, HISASHI
MURATA, TAKESHI
IIMURA, KAZUO
URAKAWA, KENJI
ARAI, TADASHI

INT-CL (IPC): C11B 3/14

ABSTRACT:

PURPOSE: To provide a purification method by which <u>rice bran oil</u> or rice embryo oil is purified efficiently in a high yield and <u>oryzanols.</u>, which are physiolgically useful and removed by the conventional purification method, are concentrated to give an edible oil rich in nutriment.

CONSTITUTION: A <u>rice bran oil</u> is purified by removing fatty acids contained in it by steam distillation in a vacuum without using an alkali such as potassium hydroxide, giving the oil contg. high concns. of <u>oryzanols</u>. The fatty acids contained are removed by steam distillation by blowing steam into the oil in a high vacuum at a high temp. pref. by using a single-shell vacuum distillation apparatus convenient for evaporation and separation.

COPYRIGHT: (C) 1994, JPO

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image

23. Document ID: JP 06298645 A

Entry 23 of 72

File: JPAB

Oct 25, 1994

PUB-NO: JP406298645A

DOCUMENT-IDENTIFIER: JP 06298645 A

TITLE: AGENT FOR TREATING AND PREVENTING HYPERLIPEMIA

PUBN-DATE: October 25, 1994

INVENTOR-INFORMATION:
NAME
KAWASHIMA, HIDETOSHI
NAKAMURA, TETSUYA
INAI, YUICHI

MIYAUCHI, YUKO

INT-CL (IPC): A61K 31/355; A61K 31/045; A61K 31/23; A61K 31/575; A61K 35/78; A61K 37/22

ABSTRACT:

PURPOSE: To obtain a medicine having highly improving effect on hyperlipemia, which has been insufficient conventionally, reducing action on lipoperoxide said to cause arteriosclerosis, showing low side effect.

CONSTITUTION: An agent for preventing and treating hyperlipemia comprises (A) γ -oryzanol, a substance extracted from a rice bran oil, (B) an unsaponified substance of soybean oil such as SOYSTEROL (trade name), a mixture of a plant sterol (40-50%) and tocopherol (18-22%) as a typical example and (C) tocopherol, most preferably d-α -tocopherol as active ingredients. Doses of the components are usually 50-300mg of the component A, 300-1,200mg of the component B and 10-200mg of the component C per adult daily and administered once or several times dividedly.

COPYRIGHT: (C) 1994, JPO

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Image

24. Document ID: JP 05331101 A

Entry 24 of 72

File: JPAB

Dec 14, 1993

PUB-NO: JP405331101A

DOCUMENT-IDENTIFIER: JP 05331101 A TITLE: PRODUCTION OF FERULIC ACID

PUBN-DATE: December 14, 1993

INVENTOR-INFORMATION:

NAME
TANIGUCHI, HISAJI
NOMURA, EISAKU
CHIKUNO, TAKUO
MINAMI, HARUYASU
KATO, KOJI
HAYASHI, CHIEKO

INT-CL (IPC): C07C 59/13; C07C 51/09

ABSTRACT:

PURPOSE: To enable efficient production of ferulic acid which is useful as a starting material for medicines, agrochemicals, cosmetics, pigments or foods by utilizing the waste products or by-products in the production of rice salad oil (<u>rice bran oil</u>) and rice fatty acids from rice bran.

CONSTITUTION: The waste product and/or by-products obtained in the production of rice salad oil and rice fatty acids from the starting substance containing α -oryzanol, preferably rice bran, for example, alkali oil lees or fatty acids are alkali-hydrolyzed to give a solution containing alkali salts of ferulic acid of about 70 to 90wt.% purity. Then, the solution is acidified to precipitate free ferulic acid, which is separated by filtration. The collected ferulic acid is dissolved in hot water (at about 90 to 100°C), then the solution is cooled down to crystallize out pure ferulic acid of the trans-form.

COPYRIGHT: (C) 1993, JPO&Japio

									-	
Fulf	Titte	Citation	Front	Review	Classification	Date	Reference	Claime	kanac	Impage
	1111	CILBRIGHT	1 IVIII	11 CALCAA	Classification	Care	I reference	01011113	144410	1111 ESE

25. Document ID: JP 05279242 A

Entry 25 of 72

File: JPAB

Oct 26, 1993

PUB-NO: JP405279242A

DOCUMENT-IDENTIFIER: JP 05279242 A

TITLE: BATHING SOLUTION

PUBN-DATE: October 26, 1993

INVENTOR-INFORMATION:

NAME

INOUE, TOSHIO NUNOKAWA, SENZOU

INT-CL (IPC): A61K 7/50; A61K 35/78

ABSTRACT:

PURPOSE: To obtain a bathing solution having improving effects on dermatopathy such as especially atopic dermatitis or senile xeroderma.

CONSTITUTION: The objective bathing solution comprises four ingredients of glycyrrhetinic acid and/or its derivative, γ -oryzanol, rice bran extract and rice bran oil at 1:(3-20):(0.05-10):(2-20) relative weight ratio of the glycyrrhetinic acid and/or its derivative, γ -oryzanol, rice bran extract and rice bran oil and a heat reserving and blood circulation promotor ingredient as active ingredients. The heat reserving and blood circulation promotor ingredient is especially a herb medicine extract essence in an amount of 10-50 times based on the glycyrrhetinic acid and/or its derivative and the concentration of the whole active ingredients is 2-10wt./wt.%.

COPYRIGHT: (C) 1993, JPO&Japio

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWC | Image |

26. Document ID: JP 04039397 A

Entry 26 of 72

File: JPAB

Feb 10, 1992

PUB-NO: JP404039397A

DOCUMENT-IDENTIFIER: JP 04039397 A TITLE: ANTIOXIDANT FOR FATS AND OILS

PUBN-DATE: February 10, 1992

INVENTOR-INFORMATION:

NAME

WAKAYAMA, TSUNEO

INT-CL (IPC): C11B 5/00; C09K 15/24; C09K 15/34

ABSTRACT:

PURPOSE: To obtain an antioxidant, composed of an unsaponified <u>rice bran oil</u>, whole tocopherols, a synergist and kojic acid, having excellent antioxidizing effects and useful for fats and oils used in foods such as food raw materials, processed foods and cooked foods.

CONSTITUTION: The objective antioxidant containing (A) unsaponified <u>rice bran oil</u>, (B) α to δ tocopherols (mixture), (C) a synergist composed of citric acid, (iso) ascorbic acid (salt or ester), phosphoric acid, condensed phosphate (lecithin, etc.), cephalin, tartaric acid, etc., and (D) kojic acid. The ratio of the component (D) to the total weight of the components (A) to (C) is preferably 0.5-20. Furthermore, if an amino acid is added, antioxidizing ability of <u>oryzanol</u> present in the component (A) is improved.

COPYRIGHT: (C) 1992, JPO&Japio

Full Title Citation Front Review Classification Date Reference Claims KMC Image

27. Document ID: JP 63014797 A

Entry 27 of 72

File: JPAB

Jan 21, 1988

PUB-NO: JP363014797A

DOCUMENT-IDENTIFIER: JP 63014797 A

TITLE: SEPARATION OF 24-METHYLENE CYCLOARTANOLFERULATE

PUBN-DATE: January 21, 1988

INVENTOR-INFORMATION:

NAME

KIMURA, GORO

INT-CL (IPC): C07J 53/00

ABSTRACT:

PURPOSE: To economically obtain the titled compound useful for hyperlipemia, antipsychotic agent, etc., in high purity and good yield, by purifying a starting material such as crude or purified <u>oryzanol</u> using specific crystallization operation.

CONSTITUTION: A substance containing 24-methylene cycloartanol formula (24-MCAFE) such as crude or purified <u>oryzanol</u>, etc., obtainable from <u>rice bran oil</u>, rice gern oil, etc., is treated at first with a 2∼10C organic acid ester and then with a mixed solvent of a 3∼10C ketone and 1∼6C alcohol to provide crystals, which are then removed, if necessary, while the filtrate is evaporated to dryness and the remainder is treated with 1 ∼6C alcohol to provide crystals containing 55% or more 24-MCFE. The 24-MCAFE-containing substance is successively crystallized from a 2∼10C organic acid ester or 3∼10C ketone or a mixed solvent of such a single solvent and a 1∼6C alcohol to provide the aimed compound.

COPYRIGHT: (C) 1988, JPO&Japio

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Image		

28. Document ID: JP 58021619 A

Entry 28 of 72

File: JPAB

Feb 8, 1983

PUB-NO: JP358021619A

DOCUMENT-IDENTIFIER: JP 58021619 A

TITLE: CONCENTRATION OF EACH CONSTITUENT FROM CRUDE OR PURIFIED ORYZANOL

PUBN-DATE: February 8, 1983

INVENTOR-INFORMATION:

NAME

USUKI, NOBUYOSHI

INT-CL (IPC): A61K 35/78; A61K 31/575; C07J 9/00

ABSTRACT:

PURPOSE: A solvent that does not dissolve <u>oryzanol</u> is added to an organic solution of crude or purified <u>oryzanol</u> to effect partial precipitation, thus economically producing high-purity constituents used in medicines and cosmetics.

CONSTITUTION: Crude or purified <u>oryzanol</u> is dissolved in an organic solvent such as acetone and insoluble contaminants are separated and removed. Then, an organic solvent in which <u>oryzanol</u> is insoluble or hard soluble such as methanol is added, or an aqueous organic solvent or an appropriate amount of water is added to cause partial precipitation and each precipitate is collected. <u>Oryzanol</u> mainly occurs in <u>rice bran oil</u> and contains a mixture of ferulic esters of triterpene alcohols. Several components used as medicines, fungicide, cosmetics or the like are obtained in high yield as high-purity concentrates.

COPYRIGHT: (C) 1983, JPO&Japio

Full	Title Cita	ation Front	Review	Classification	Date	Reference	Claims	KMC	Image	

29. Document ID: JP 57163316 A

Entry 29 of 72

File: JPAB

Oct 7, 1982

PUB-NO: JP357163316A

DOCUMENT-IDENTIFIER: JP 57163316 A

TITLE: PREPARATION OF SUBSTANCE HAVING ANTIFUNGAL, ANTISEPTIC, GERMICIDAL AND PREVENTING ACTION ON RANCIDIFICATION AND GROWTH PROMOTING EFFECT ON ANIMAL

PUBN-DATE: October 7, 1982

INVENTOR-INFORMATION:

NAME

HIRANO, YUKIO HIYAMA, TAKAO

INT-CL (IPC): A61K 35/78; A01N 65/00; A23L 3/00; C09K 15/34

ABSTRACT:

PURPOSE: To obtain the titled substance with slight impurities easily in high yield, by extracting a by-product formed in the purification of <u>rice bran oil</u>, etc. with a hydrous organic solvent, and treating the by-product with a hydrocarbon solvent.

CONSTITUTION: A by-product formed in the purification of rice bran oil or rice bran oil or dark oil or a fraction having a high boiling point ≥200°C obtained by the molecular distillation of a monohydric lower alcoholic ester of the dark oil is extracted with an alkaline solution of a monohydric alcohol, e.g. alkaline methanol, and then acidified weakly to separate a viscous material, which is then extracted with a hydrous organic solvent, e.g. methanol. After distilling off the organic solvent, a hydrocarbon solvent, e.g. n-hexane, is added to the resultant residue to remove tarry impurities completely, and then the remaining material is saponified with an alkali to remove and separate the impurities. The extract is then acidified to separate the aimed substance as an oil, which is then mixed with oryzanol and to give the aimed substance.

COPYRIGHT: (C) 1982, JPO&Japio

Full Title Citation Front Review Classification Date Reference Claims KWC Image											
	Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image

30. Document ID: JP 55122722 A

Entry 30 of 72

File: JPAB

Sep 20, 1980

PUB-NO: JP355122722A

DOCUMENT-IDENTIFIER: JP 55122722 A TITLE: DEODORIZING OF PLACENTA POWDER

PUBN-DATE: September 20, 1980

INVENTOR-INFORMATION:

NAME

TAKEYASU, TERUO

INT-CL (IPC): A61K 35/50

ABSTRACT:

PURPOSE: To obtain placenta powder useful as drugs, foods, etc. capable of being administered easily without pungent odor, by dipping placenta powder in an oryzanol-containing solution.

CONSTITUTION: Placenta powder is dipped in a γ -oryzanol-containing vegetable oil (e.g., wheat embryo bud oil or rice bran oil) or a solution of oryzanol in an organic solvent (e.g., acetone, a mixed solvent of acetone and alcohol) and deodorized. The vegetable oil can be administered directly as a mixture. The organic solvent is needed to be evaporated. An amount of oryzanol based on the placenta powder is preferably 0.1∼ 0.05wt%.

USE: Curing for adrenogenital syndrome, e.g., menstrual disorder, vegetative Stigmata, prevention and removal of wrinkles on the corner of the eye, stain, freckle, pimple, etc., and beauty culture, e.g., growth of the brearts.

COPYRIGHT: (C) 1980, JPO&Japio

Full Title Citation Front Review Classification Date Reference Claims KWC Image

31. Document ID: JP 55033451 A

Entry 31 of 72

File: JPAB

Mar 8, 1980

PUB-NO: JP355033451A

DOCUMENT-IDENTIFIER: JP 55033451 A TITLE: PREPARATION OF COSMETIC

PUBN-DATE: March 8, 1980

INVENTOR-INFORMATION:

NAME

MORITA, SHUGO

INT-CL (IPC): A61K 7/00

ABSTRACT:

PURPOSE: To provide cosmetics effective to xerodermia, dandruff, urtication, etc., containing a specific ester as an effective component.

CONSTITUTION: Cosmetics effective to xerodermia, dandruff, urtication, etc. containing an ester of a carboxylic acid having a phenolic OH group and a ≥12C alcohol, e.g. stigmasteryl ferulate, cholesteryl ferulate, lauryl ferulate, cholesteryl p-hydroxybenzoate, cetyl p-hydroxybenzoate, etc. The compounds are components of oryzanol obtained from rice bran oil, which is a known agent having the above effects.

COPYRIGHT: (C) 1980, JPO&Japio

Full Title Citation Front Review Classification Date Reference Claims KWC Image

32. Document ID: JP 57149248 A

Entry 32 of 72 File: JPAB Sep 14, 1982

PUB-NO: JP357149248A

DOCUMENT-IDENTIFIER: JP 57149248 A

TITLE: CYCLOARTENOL FERULIC ESTER, ONE COMPONENT OF <u>ORYZANOL</u>, HAVING ACTION CLOSELY RELATED TO PROPAGATION OF ANIMAL, PHARMACEUTICAL AND PHYSIOLOGICAL ACTION OF ORYZANOL

PUBN-DATE: September 14, 1982

INVENTOR-INFORMATION:

NAME

TSUCHIYA, TOMOTARO

INT-CL (IPC): C07C 69/734

ABSTRACT:

NEW MATERIAL: Cycloartenol ferulic ester.

USE: A drug having pharmaceutical and physioligical action of <u>oryzanol</u>, useful as a promotor for growth and an estrous agent for animal, a remedy for menopausal disorder or hepatic disorder, a cholesterin deposit inhibitor for the artery, having gonard stimulating effect. Further an antioxidant.

PROCESS: Residuary substances of <u>rice-bran oil</u> and soda oil are dissolved in a water-containing alcohol, acidified weakly with acetic acid, and extracted with an ether. The extracted solution is washed with 5wt% aqueous solution of potassium hydroxide, 3wt% aqueous solution of potassium carbonate, and 3wt% methanol-water solution of potassium hydroxide respectively, and decomposed with acetic acid to give a phenolic substance. This substance is then absorbed on alumina, and an elution fraction of ether and methanol (20:1) is collected, to give a raw ferulic ester, which is purified with 3wt% methanol-water solution of potassium hydroxide, to give the ferulic ester.

COPYRIGHT: (C) 1982, JPO&Japio

Full Title Citation Front Review Classification Date Reference Claims KWC Image

33. Document ID: AU 9892149 A, WO 9911142 A1

Entry 33 of 72

File: DWPI

Mar 22, 1999

DERWENT-ACC-NO: 1999-204926

DERWENT-WEEK: 199931

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Production of micro nutrient - enriched rice bran oil having an enhanced

antioxidant content

INVENTOR: CHERUKURI, R S V; CHERUVANKY, R; LYNCH, I; MCPEAK, D L

PRIORITY-DATA:

1998US-0144839 1997US-0057850

August 31, 1998

September 2, 1997

PATENT-FAMILY:

 PUB-NO
 PUB-DATE
 LANGUAGE
 PAGES
 MAIN-IPC

 AU 9892149 A
 March 22, 1999
 N/A
 000
 A23D009/02

 WO 9911142 A1
 March 11, 1999
 E
 025
 A23D009/02

INT-CL (IPC): $\underline{A23} \ \underline{D} \ \underline{9/02}$

ABSTRACTED-PUB-NO: WO 9911142A

BASIC-ABSTRACT:

NOVELTY - A solvent extraction technique for enriching a <u>rice bran oil</u> with gamma <u>- oryzanol</u> and tocol products having antioxidant properties

DETAILED DESCRIPTION - A <u>rice bran oil</u> having an enhanced antioxidant content is obtained, by:

- (a) mixing rice bran oil and a lower aliphatic alcohol;
- (b) allowing the mixture to settle forming an oil layer and an alcohol layer;
- (c) separating the 2 layers; and
- (d) distilling the alcohol to recover the <u>rice bran oil</u> product.

USE - Antioxidant-enriched <u>rice bran oil</u> contain tocopherol, tocotrienol and gamma <u>- oryzanol</u> and is useful as such in pharmaceutical, therapeutic and dietary preparations

ADVANTAGE - The process recovers 74-300% more antioxidants that the starting crude rice bran oil

DESCRIPTION OF DRAWING(S) - A schematic diagram illustrates a system for implementing an embodiment of the method used.

Full Title Citation Front Review Classification Date Reference Claims KMC Image

34. Document ID: CN 1224443 A, WO 9801519 A1, AU 9735400 A, ZA 9705992 A, EP 912665 A1 Entry 34 of 72 File: DWPI Jul 28, 1999

DERWENT-ACC-NO: 1998-159079

DERWENT-WEEK: 199948

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Oryzanol concentrate separation - from oryzanol-containing fatty substance,

particularly crude oil, in highly economical process INVENTOR: HOFMAN, C; ZWANENBURG, A ; VAN AMERONGEN, M P

PRIORITY-DATA:

1996EP-0201870

July 5, 1996

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
CN 1224443 A	July 28, 1999	N/A	000	C11B003/00
WO 9801519 A1	January 15, 1998	E	028	C11B003/00
AU 9735400 A	February 2, 1998	N/A	000	C11B003/00
ZA 9705992 A	March 31, 1999	N/A	024	C11B000/00
EP 912665 A1	May 6, 1999	E	000	C11B003/00

INT-CL (IPC): A23 D 9/02; C11 B 0/00; C11 B 3/00; C11 B 13/00

ABSTRACTED-PUB-NO: WO 9801519A

BASIC-ABSTRACT:

Oryzanol (any type of steryl cinnamic acid derivatives) concentrate may be obtained from an oryzanol-containing fatty substance, which is preferably a crude oil, by (a) at least one of (1) removal of phospholipids present, and (2) removal of free fatty acids, preferably by stripping; (b) alkali neutralisation of the product; and (c) separation and removal of the oil phase. Also claimed is the oryzanol concentrate obtained, particularly the concentrate in fat or oil, especially rice bran oil.

USE - Oryzanol has potential pharmacological uses, in fat-based food products, and in cosmetic uses.

ADVANTAGE - No other economically feasible method of direct recovery of oryzanol from a crude oil is known. This process is highly economical. The oryzanol is obtained substantially free of any undesired components.

					·····					
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KOMIC	Image

35. Document ID: JP 07026288 A

Entry 35 of 72

File: DWPI

Jan 27, 1995

DERWENT-ACC-NO: 1995-102190

DERWENT-WEEK: 199514

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Purificn. of rice bran oil, leaving physiologically active phenolic substances in the oil - using pH indicator having transition point of about five

PRIORITY-DATA:

1993JP-0168030

July 7, 1993

PATENT-FAMILY:

 PUB-NO
 PUB-DATE
 LANGUAGE
 PAGES
 MAIN-IPC

 JP 07026288 A
 January 27, 1995
 N/A
 003
 C11B003/06

INT-CL (IPC): A23 D 9/02; C11 B 3/06; C11 B 5/00

ABSTRACTED-PUB-NO: JP07026288A

BASIC-ABSTRACT:

In the alkali purificn. process of a new deoxidation purificn. of <u>rice bran oil</u>, a pH indicator having a transition point of about 5 is used as an indicator for measurement of the acid value on removal of free fatty acids to leave physiologically active phenolic substances in the oil.

Pref. the indicator is Alkali Blue 6B or Bromothymol Blue. Pref. the phenolic substance is oryzanol and/or tocopherol.

USE/ADVANTAGE - The oil obtd. is useful as an edible oil rich in e.g. <u>oryzanol</u>. The method allows the phenolic substances to be left without thermal decomposition, requires lower initial costs than the conventional dist. deoxidisation and significantly simplifies the purificn. process.

Full Title Citation Front Review Classification Date Reference Claims KWC Image

36. Document ID: AU 709568 B, EP 710477 A1, AU 9533193 A, NO 9504178 A, NZ 280257 A, CA 2161157 A, JP 08208452 A, ZA 9509328 A, MX 9504625 A1, US 5744145 A

Entry 36 of 72

File: DWPI

Sep 2, 1999

DERWENT-ACC-NO: 1996-223274

DERWENT-WEEK: 199948

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Cosmetic lipid compsns. contg. <u>rice-bran oil</u> and sesame oil - are rich in unsaponifiable cpds. active as anti-oxidants, used to combat skin-ageing due to e.g. exposure to UV radiation

INVENTOR: BERTOLI, C; BRACCO, U; DELVECCHIO, A; MALNOE, A; MALONE, A

PRIORITY-DATA:

1994EP-0117482

November 5, 1994

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
AU 709568 B	September 2, 1999	N/A	000	A61K007/48
EP 710477 A1	May 8, 1996	F	010	A61K007/48
AU 9533193 A	May 16, 1996	N/A	000	A61K007/48
NO 9504178 A	May 6, 1996	N/A	000	A61K007/48
NZ 280257 A	July 26, 1996	N/A	000	A61K007/48
CA 2161157 A	May 6, 1996	N/A	000	A61K007/40
JP 08208452 A	August 13, 1996	N/A	006	A61K007/48
ZA 9509328 A	July 30, 1997	N/A	018	A61F000/00
MX 9504625 A1	January 1, 1997	N/A	000	A61K007/40
US 5744145 A	April 28, 1998	N/A	005	A61K007/00

INT-CL (IPC): $\underline{A23}$ \underline{D} $\underline{5/00}$; $\underline{A23}$ \underline{D} $\underline{9/007}$; $\underline{A23}$ \underline{D} $\underline{9/013}$; $\underline{A61}$ \underline{F} $\underline{0/00}$; $\underline{A61}$ \underline{K} $\underline{7/40}$; $\underline{A61}$ \underline{K} $\underline{7/40}$; $\underline{A61}$ \underline{K} $\underline{7/48}$; $\underline{C11}$ \underline{B} $\underline{3/14}$

ABSTRACTED-PUB-NO: EP 710477A BASIC-ABSTRACT:

Lipid compsns. for cosmetic use contain <u>rice-bran oil</u> and sesame oil, have an unsaponifiables content of 2-3 wt.%, and have a triglyceride fatty acid compsn. comprising 30-40 wt.% oleic acid, 40-50 wt.% linoleic acid and < 2 wt.% alpha-linolenic acid. Also claimed is the prodn. of such a compsn. by degumming, decolourising and deodorising the oil mixt. under conditions such that the prod. has an unsaponifiables content of at least 2 wt.% and an oxidative stability corresp. to an induction period of at least 15 hrs. in the Rancimat test at 100deg.C.

USE - The compsn. can be applied topically or used as nutritional supplements with the aim of combatting skin ageing due to exposure to UV radiation and radical-generating pollution.

ADVANTAGE - Rice-bran oil contains gamma-oryzanol, which has antioxidant activity. Sesame oil contains delta-5-desaturase inhibitors with antiinflammatory activity. ABSTRACTED-PUB-NO:

US 5744145A EQUIVALENT-ABSTRACTS:

Lipid compsns. for cosmetic use contain <u>rice-bran oil</u> and sesame oil, have an unsaponifiables content of 2-3 wt.%, and have a triglyceride fatty acid compsn. comprising 30-40 wt.% oleic acid, 40-50 wt.% linoleic acid and < 2 wt.% alpha -linolenic acid. Also claimed is the prodn. of such a compsn. by degumming, decolourising and deodorising the oil mixt. under conditions such that the prod. has an unsaponifiables content of at least 2 wt.% and an oxidative stability corresp. to an induction period of at least 15 hrs. in the Rancimat test at 100 deg. C.

USE - The compsn. can be applied topically or used as nutritional supplements with the aim of combatting skin ageing due to exposure to UV radiation and radical-generating pollution.

ADVANTAGE - Rice-bran oil contains gamma -oryzanol, which has antioxidant activity. Sesame oil contains delta -5-desaturase inhibitors with antiinflammatory activity.

			***********	MARKET CONTRACTOR				***************************************
Full Title C	Tarana and the same of the sam	Carriery !	Classification	D.A.	Deference	01-11	1/3/1/50	
Fruit Title ; C	asuon Front	Medienn	Classification	Pare	Reference	G latims	t/\000b2+	MESE :

37. Document ID: JP 08081352 A

Entry 37 of 72

File: DWPI

Mar 26, 1996

DERWENT-ACC-NO: 1996-217163

DERWENT-WEEK: 199622

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: External dermal preparation contg. gamma-oryzanol and urea - also contains ferulic acid ester of phytosterol

PRIORITY-DATA:

1994JP-0102732

May 17, 1994

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 08081352 A

March 26, 1996

N/A

009

A61K007/48

INT-CL (IPC): <u>A61 K 7/00</u>; <u>A61 K 7/48</u>; <u>A61 K 31/17</u>; <u>A61 K 31/215</u>; <u>A61 K 31/575</u>

ABSTRACTED-PUB-NO: JP08081352A

BASIC-ABSTRACT:

Prepn. contains 8-23 wt.% urea and 0.5-5 (pref. 1-4) wt.% gamma<u>-oryzanol</u> contg. 20% of more ferulic acid ester of phytosterol.

Gamma-oryzanol content is 20% or more (pref. 20-30%). Ferulic acid ester of phytosterol (such as campesterol, stigmasterol and beta-sitostero 1), is pref. prepd. from rice bran oil by de-acidifying with aq. conc. alkali soln. followed by centrifugation to collect 1st de-acidified oil, weakly alkalising it with aq. alkali soln. followed by centrifugation to remove neutral oil and fatty acids giving 2nd foots, neutralizing it with sulphuric acid followed by thorough wash to give 2nd dark oil, esterification to remove residual fatty acid as methyl ester, chromatography over ion exchange resin (OH-type) to give crude gamma-oryza nol of 80-95% purity, purification via urea-adduct to give 93-97% purity, treatment with active carbon, chromatography over ion exchange resin (H+type) and crystallization from n-hexane.

USE/ADVANTAGE - The prepn. has moisturizing and sebaceous gland activating activities and esp. is effective as prophylactic and remedy to desiccative dermal disease such as xeroderma. The prepn. accelerates sebaceous secretion.

Five cream preparations respectively contg. 2.0g (Ex.4), 1.0g (Ex. 5) and 4.0g (Ex.6) gamma-oryzanol (contg. 24% ferulic acid ester of phytosterol), 2.0g commercially available gamma-oryzanol contg. 15% ferulic acid ester of phytosterol (Ref. Ex.1), and 0 gamma-oryzanol (Control Ex.1) were prepared according to the following prescription giving other ingredients (g): 10.0 urea, 0.1 propyl paraben, 0.1 methyl paraben, 1.0 hard fat, 1.0 octyl dodecyl myristate, 3.0 stearyl alcohol, 1.0 cholesterol, 2.0 cetyl lactate, 6.0 methyl polysiloxane, 1.0 glycerol monostearate, 7.0 self-emulsible glycerol monostearate, 1.0 sorbitol stearate, 4.0 polyethylene glycol monostearate, 12.0 glycerol, 20.0 1%-carboxyvinyl polymer soln. and water (for remainder portion to make 100).

The cream preparations of Ex. 4-6, Ref.Ex 1 and Control Ex.1 were applied on inside skin of auricle of female Syrian golden hamster (10-12 weeks) per one drop (0.05 ml) once a day for consecutive 14 days, and area of sebaceous gland of the cleaved inside skin of auricle was determined by whole mount technique to give result of Fig. 1: (1): Control ex.1, (2): Ex.5, (3): Ex.4, (4): Ex.6, (5): Ref.ex 1, showing significant volume enlarge and activation of sebaceous gland in samples (2)-(4) contg. gamma-oryzanol (contg. 20% or more ferulic acid ester of phytosterol) compared with (1) contg. no gamma-oryza nol, and (5) contg. less than 20% ferulic acid ester of phytosterol (commercially available) exhibited not significant activation of sebaceous gland.

Full Title Citation Front Review Classification Date Reference Claims KMC Image	Full Tit	le Citation	Front Review	Classification	Date	Reference	Claims	KWIC	Image
---	----------	-------------	--------------	----------------	------	-----------	--------	------	-------

38. Document ID: JP 06272172 A

Entry 38 of 72

File: DWPI

Sep 27, 1994

DERWENT-ACC-NO: 1994-347647

DERWENT-WEEK: 199443

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Modified fabric for sportswear - has gamma oryzanol deriv. on fibre surface

PRIORITY-DATA:

1993JP-0063893

March 23, 1993

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 06272172 A

September 27, 1994

N/A

007

D06M013/224

INT-CL (IPC): C08K 5/13; C09K 3/00; D06M 13/224

ABSTRACTED-PUB-NO: JP06272172A

BASIC-ABSTRACT:

A modified fabric is one which has a deriv. of gamma-oryzanol on its fibre surface and/or in its fibre's interior.

A deriv. of gamma-oryzanol is isomers of gamma-oryzanol and their hydrolysis products, extracted from rice bran oil. To impregnate the compounds to a fabric, it is immersed in a solution of a derivative of gamma-oryzanol; after drying, the fabric is treated with heat at a temperature equal to or higher than the melting point of the gamma-oryzanol deriv.

USE/ADVANTAGE - This fabric is used for underwear or sportswear. It has a UV-cutting-off effect and also an antibacterial effect.

									-	
Frei	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KORAC	Image
		O ILEANOTE	11011	11-41-44	0.00001110011011	0.010	11212121122	0.10111112	100000	

39. Document ID: JP 06340889 A

Entry 39 of 72

File: DWPI

Dec 13, 1994

DERWENT-ACC-NO: 1995-063965

DERWENT-WEEK: 199509

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Prepn. of rice oil contg. large amts. of oryzanol(s) - by removing fatty acids from crude rice bran oil by steam distn. in absence of alkali

PRIORITY-DATA:

1993JP-0149783

May 31, 1993

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 06340889 A

December 13, 1994

N/A

004

C11B003/14

INT-CL (IPC): C11B 3/14

ABSTRACTED-PUB-NO: JP06340889A

BASIC-ABSTRACT:

Prepn. of oryzanol-enriched rice oil comprises removing fatty acids from crude rice bran oil through steam distn. in a vacuum without alkalis, such as NaOH to condense oryzanols. Pref. fatty acids are distilled away by blowing steam into the oil in a high vacuum at high temps. in a vacuum distilling appts. having a single-shell structure for evapn. sepn.

The alcohol of oryzanols, or ferulic esters, e.g. one or a mixt. of sterols and terpene alcohols. The purified process of crude rice bran oil typically consists of a degumming, a dewaxing, a decolouring, the steam distilling a decolouring, a low-temp. dewaxing and the steam distilling process. The distn. conditions are pref. 2-4 mmHg, 220 deg.C and an amt. of steam blown of 2-4 wt. % relative to amt. of the crude oil.

USE/ADVANTAGE - Without any alkali used in the purifying process, the method gives an edible rice oil contg. oryzanols in large amts. and having a good and natural flavour.

				**************	A		************************			
Full	i litle :	I dation I	Front I	- Rienderot	Classification	Date	: Meterence	i i anne i	81000	mene i
2.11		OFFICE STATES	1 10111	11001000	O INDO III WALLOW	0.00	TISTED STILLS	1 2 12 11 12 1	10000	

40. Document ID: JP 05279242 A

Entry 40 of 72

File: DWPI

Oct 26, 1993

DERWENT-ACC-NO: 1993-374522

DERWENT-WEEK: 199347

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Bathing liquids for improving skin disorders - contain glycerrhetinic acid (derivs.) gamma oryzanol, rice bran extract, rice bran oil, blood circulation improvers, etc.

PRIORITY-DATA:

1992JP-0019967

February 5, 1992

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 05279242 A

October 26, 1993

N/A

005

A61K007/50

INT-CL (IPC): A61K 7/50; A61K 35/78

ABSTRACTED-PUB-NO: JP05279242A

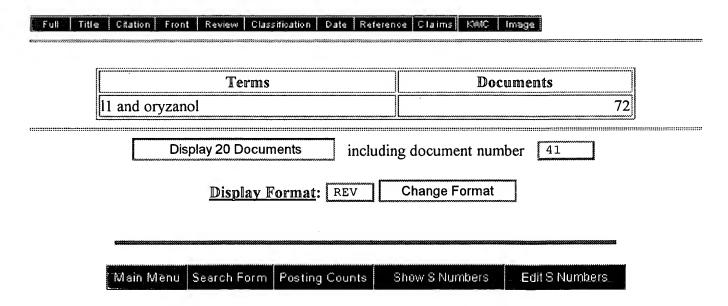
BASIC-ABSTRACT:

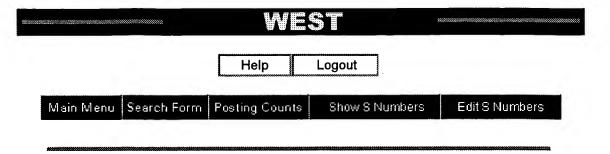
Bath liqs. contain 1 wt. part glycyrrhetinic acid and/or its derivs., 3-20 wt.pts. gamma-oryzanol, 0.05-10 wt.pts. rice bran extract, and 2-20 wt.pts. rice brain oil together with body-warming and blood circulation improving agents as effective components. The body-warming and blood circulation improving agents are crude drug exts. which are included in 10-50 wt.pts. to glycyrrhetinic acid and/or its derivs. The total wt. of the effective components amounts to 2-10 w/w% of the bath liqs. concn.

The crude drug extracts are obtd. from matricaria chamomillae flos, cnidii rhizoma, angelica radix, cinnamoni cortex etc.

USE/ADVANTAGE - Effective for improving skin disorders such as prickly heat, chilblains, chaps, cracks, and rough skin. The effectiveness is esp. remarkable against atopic dermatitis and senile xeroderma (dry skin).

In an example, Component A was prepd. by mixing 1.0 kg gamma-oryzanol, 0.3 kg rice bran oil, 4.0 kg isopropyl myristate, and 10.0 kg emulsifier (pyroglutamic acid isostearic acid polyoxyethylene (25) glyceryl). Component B was prepd. by mixing 0.1 kg dipotassium glycyrrheti nate, 30 kg rice bran extract liq. (contg. 2 wt.% extract), 3 kg chamomile flower extract, 30.6 kg 1,3-butylene glycol, and 21 kg pure water. Component A was heated at 70-80 deg.C to complete soln. and cooled to 40 deg.C. To this was slowly added Component B and the mixt. stirred to give a transparent bath liq.





Search Results - Record(s) 41 through 60 of 72 returned.

41. Document ID: JP 04353539 A

Entry 41 of 72

File: DWPI

Dec 8, 1992

DERWENT-ACC-NO: 1993-024312

DERWENT-WEEK: 199303

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Polyolefin compsn. used to inhibit generation of fungi - comprises $\underline{\text{oryzanol}}$ which is present in rice bran or rice germ oil

PRIORITY-DATA:

1991JP-0153781

May 30, 1991

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 04353539 A

December 8, 1992

N/A

003

C08L023/00

INT-CL (IPC): C08K 5/13; C08L 23/00

ABSTRACTED-PUB-NO: JP04353539A

BASIC-ABSTRACT:

Compsn. contains 0.01-3 wt% or <u>oryzanol</u>. <u>Oryzanol is present in rice bran oil</u> or rice germ oil and is a mixt. of several cpds. They can be sepd. or used in mixt. Pref. amt. of addn. to polyolefin is 0.03-2.0 wt.%. <u>Oryzanol</u> is a growth accelerator of mice or hen. It is a safe food ingredient, so there is no danger of any hazards.

ADVANTAGE - Product inhibits the generation of fungi.

In an example, Polyolefin contg. 98% of isotactic component (MFR 4.5) is polymerised using Ziegler-Natta catalyst. 0.05 wt.% of tetrachis (methylene-3-(3,5-di-tert-butyl-4-hydroxy) phenylpropionate) methane (antioxidant) and specific amt. of <u>oryzanol</u> are added. They are mixed and extruded at 230 deg.C into a pellet which is then compression-moulded into a sheet 1 mm thic

F	ull	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KOME	lmage
-											

42. Document ID: JP 59053415 A

Entry 42 of 72

File: DWPI

Mar 28, 1984

DERWENT-ACC-NO: 1984-116613

DERWENT-WEEK: 198419

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Base compsns. for adhesive plaster - contg rubber adhesive and gamma-oryza

nol

PRIORITY-DATA:

1982JP-0164227

September 21, 1982

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 59053415 A

March 28, 1984

N/A

003

N/A

INT-CL (IPC): A61K 9/70

ABSTRACTED-PUB-NO: JP59053415A

BASIC-ABSTRACT:

Pharmaceutical ingredients (especially phenollic OH-contg. cpds. and amine cpds.) incorporated in the present compsns. are not decomposed and may be kept stable for long periods.

Pref. rubber adhesives are diene polymers (natural rubber, synthetic rubber, their mixts.), e.g. styrene-isoprene-styrene block copolymer rubber, styrene-butadiene rubber, polybutene rubber, polyisoprene rubber, butyl-rubber, silicone-rubber. Gamma-oryzanol (I) may be pure cpd., or (I)-contg. substances may be used, e.g. extracts of (I)-contg. plants extracted with organic solvent (e.g. chloroform, toluene, ethanol, n-propanol, hexane, ethylether, acetone), opt. conc. rice bran oil, extract of rice bran oil. Content of (I) is generally 0.005-3 wt.% w.r.t. rubber base substance.

The second second		V	**************		,		· · · · · · · · · · · · · · · · · · ·			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KAMC	Image

43. Document ID: JP 57163316 A

Entry 43 of 72

File: DWPI

Oct 7, 1982

DERWENT-ACC-NO: 1982-98270E

DERWENT-WEEK: 198246

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: High purity extract of rice bran oil prodn. - useful as antifungal antiseptic antibacterial rancidity preventing and animal growth stimulating agent

PRIORITY-DATA:

1981JP-0048928

April 1, 1981

PATENT-FAMILY:

JP 57163316 A

PUB-NO PUB-DATE LANGUAGE

PAGES MAIN-IPC

005 N/A

N/A

INT-CL (IPC): A01N 65/00; A23L 3/00; A61K 35/78; C09K 15/34

October 7, 1982

ABSTRACTED-PUB-NO: JP57163316A

BASIC-ABSTRACT:

Prodn. of active component (I) comprises extracting rice bran oil or its purificn. by-prod. or its acidulated soap stock or the high boiling fraction of higher than 200 deg.C obtd. by mol. distn. of monovalent lower alcohol ester of acidulated soap stock, with an alkaline soln. of monovalent lower alcohol (MeOH, EtOH) or alkali soln. of organic solvent contg. the alcohol as main component, then slightly acidifying the extract, extracting the resultant viscous material with an aq. organic solvent (e.g. MeOH, EtOH, PrOH, Me2CO), a hydrocarbon solvent (e.g. n-hexane, i-hexane, cyclohexane) to the residue, removing the ppte., extracting the soln. with a caustic alkali aq. soln., and acidifying the extract to give the desired prod. as an oily material. If required, oryzanol is added to the oily material.

Highly pure (I) can be produced by extraction of said raw material with aq. organic solvents and hydrocarbon solvents. Used as antifungal, antiseptic, antibacterial, preservative, and animal growth stimulating substance.

Full Title Citation Front Review Classification Date Reference Claims 1996 Image

44. Document ID: JP 80010600 B, JP 48075607 A

Entry 44 of 72

File: DWPI

Mar 17, 1980

DERWENT-ACC-NO: 1980-33924C

DERWENT-WEEK: 198019

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Extn. of anti-acidification substance from rice bran oil - by extn. with

alkali contg. water-soluble solvent, acidifying, recovering solid ppte.,

dissolving in solvent, removing residue etc.

PRIORITY-DATA:

1972JP-0006316 1976JP-0145658 January 14, 1972

May 12, 1980

PATENT-FAMILY:

 PUB-NO
 PUB-DATE
 LANGUAGE
 PAGES
 MAIN-IPC

 JP 80010600 B
 March 17, 1980
 N/A
 000
 N/A

 JP 48075607 A
 October 12, 1973
 N/A
 000
 N/A

INT-CL (IPC): C07G 17/00; C11B 11/00

ABSTRACTED-PUB-NO: JP80010600B

BASIC-ABSTRACT:

Method comprises removing fatty acids from rice-bran oil by vacuum distn., extracting the oil with alkali-contg. water-soluble solvent, acidifying the extract soln., recovering the solid ppte., dissolving the solid in solvent, removing solid residue (mainly oryzanol) and removing solvent to give red-brown, tacky substance.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image

45. Document ID: JP 54160400 A, JP 84045037 B

Entry 45 of 72

File: DWPI

Dec 19, 1979

DERWENT-ACC-NO: 1980-35200C

DERWENT-WEEK: 198020

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Recovering pure fatty acid <u>rice bran oil</u> residue - by decomposing <u>rice bran</u> oil alkali oil residue with sulphuric acid, washing, dehydrating and distilling

PRIORITY-DATA:

1978JP-0066817

June 5, 1978

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 54160400 A	December 19, 1979	N/A	000	N/A
JP 84045037 B	November 2, 1984	N/A	000	N/A

INT-CL (IPC): C07C 67/48; C07C 69/76; C07J 9/00; C11B 3/04; C11B 13/02

ABSTRACTED-PUB-NO: JP54160400A

BASIC-ABSTRACT:

The method comprises decomposing the alkali oil residue obtd. from <u>rice bran oil</u> with H2SO4, opt. washing the crude fatty acid obtd. with H2O, washing the crude fatty acid with aq. soln. of water-soluble organic solvents until it is neutralised, dehydrating the prod., and distilling at <250 degrees C under reduced pressure.

Crude <u>oryzanol</u> is collected by extracting the residue with alkali-alcohol soln. and making the extract slightly acidic. Ferulic acid ester of sterol and ferulic acid esters of triterpene alcohols, is collected by treating the crude <u>oryzanol</u> with acetone to collect ferulic acid ester of sterol from the acetone-insol. portion and ferulic acid ester of triterpene alcohol from the acetone-soluble portion.

Oryzanol contg. large amt. of active principle. ferulic acid ester of cyclobranol, antiseptic and antimould agent and anti-acidification agent are obtd. in high yields.

CALLETTE THE COLUMN AND AND ADDRESS OF THE COLUMN AND ADDRESS OF THE C			
Full Title Citation Front	Review Classifi	cation Date Reference	e Claims KWIC Image

46. Document ID: JP 53018605 A, JP 80041677 B

Entry 46 of 72

File: DWPI

Feb 21, 1978

DERWENT-ACC-NO: 1978-26051A

DERWENT-WEEK: 197814

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Sepg. rice oil e.g. dewaxed rice oil - into neutral fatty oil, fatty acid and phenolic material, using aq. solns. of polar and non-polar solvents and aq. alkali

PRIORITY-DATA:

1976JP-0093432

August 4, 1976

PATENT-FAMILY:

 PUB-NO
 PUB-DATE
 LANGUAGE
 PAGES
 MAIN-IPC

 JP 53018605 A
 February 21, 1978
 N/A
 000
 N/A

 JP 80041677 B
 October 25, 1980
 N/A
 000
 N/A

INT-CL (IPC): C11B 7/00

ABSTRACTED-PUB-NO: JP53018605A

BASIC-ABSTRACT:

Rice oil (<u>rice bran oil</u>, rice germ oil, dewaxed rice oil) is sepd. into neutral fatty oil, fatty acid and phenolic material (<u>oryzanol</u>) using aq. soln. of polar solvent, aq. soln. of non-polar solvent and aw. alkali soln. Prods. are obtd. in high purity, simultaneously and inexpensively.

Full Title Citation Front Review Classification Date Reference Claims KMC Image

47. Document ID: JP 78005320 B

Entry 47 of 72

File: DWPI

Feb 25, 1978

DERWENT-ACC-NO: 1978-22986A

DERWENT-WEEK: 197812

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Sepn. of oily material from $\underline{\text{rice bran oil}}$ - the product being a solvent for cyclic cpds. such as $\underline{\text{oryzanol}}$

PRIORITY-DATA:

1968JP-0022753

April 6, 1968

PATENT-FAMILY:

PUB-NO PUB-DATE LANGUAGE PAGES MAIN-IPC
JP 78005320 B February 25, 1978 N/A 000 N/A

INT-CL (IPC): A61K 35/78; B01D 11/00; B01D 15/00; C07G 17/00

ABSTRACTED-PUB-NO: JP78005320B

BASIC-ABSTRACT:

Sepn. of a substance, having 228, 235 and 224m max. absorption and which dissolves out cholesterin and oryzanol from rice bran oil, comprises (i) extracting residue from distn. of rice bran oil fatty acid distillate from deodorisation of rice bran oil prodn. alkali oil scum of rice bran oil, rice dark oil or rice bran, with hydrophylic solvent, such as methanol or acetone (ii) dissolving the extract in nonpolar solvent or mixed solvent; (iii) passing the mixed liquor through active alumina bed; (iv) washing the alumina bed with non-polar solvent; (v) accumulating the effluent; and (vi) distilling the effluent to remove solvent.

Novel product, in which cyclic compound, such as cholesterin or <u>oryzanol</u> may be dissolved, is provided.

Full Title Citation Front Review Classification Date Reference Claims KMC Image

48. Document ID: JP 52068210 A

Entry 48 of 72

File: DWPI

Jun 6, 1977

DERWENT-ACC-NO: 1977-51158Y

DERWENT-WEEK: 197729

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Rice bran oil compsn. - having good antioxidation and antihydrolysis

properties to oils and fats

PRIORITY-DATA:

1976JP-0150323 1971JP-0088059

December 2, 1975 November 5, 1971

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 52068210 A

June 6, 1977

N/A

000

N/A

INT-CL (IPC): C11B 5/00; C11B 7/00

ABSTRACTED-PUB-NO: JP52068210A

BASIC-ABSTRACT:

The anti-acidifying compsn. which is prepd. by distilling dark oil obtd. from alkali oil foots of rice bran oil, or rice bran oil fatty acid or its monohydric lower alcohol ester to remove the fatty acid components (distilled until about 180 degrees C.).

The residue is extd. with water-soluble organic solvent contg. alkali. The alkaline soln. sepd. making this slightly acidic (e.g. pH 6.9) or neutral. Substances deposited (principally oryzanol), are removed making the soln. acidic (e.g. pH 5.8), and obtaining a viscous substance. (Ultraviolet absorption spectra of n-heptane soln. exhibit strong absorptions at 230, 258, 262, 269, 280, 285, 287 and 314 m mu and weak absorptions at 248, 253, 260, 265 and 282 m mu respectively).

The resulting viscous substance exhibits excellent anti-oxidation and anti-hydrolysis effects for oils and fats. In an example, a viscous substance of a reddish brown colour 3 g. was obtained from 1 kg. of methyl ester of dark oil. When the substance, (0.1%), was added to linseed oil (iodine value 180.1) and the mixt. was applied to glass plate to form thin film, no dry film was formed even after standing for 45 days in summer season.

Full Title Citation Front Review Classification Date Reference Claims KWC Image

49. Document ID: JP 51129000 A, JP 80002440 B

Entry 49 of 72

File: DWPI

Nov 10, 1976

DERWENT-ACC-NO: 1977-33330Y

DERWENT-WEEK: 197719

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Steroid extraction from rice bran oil and/or rice embryo oil - using aq.

alkali and finally acetone

PRIORITY-DATA:

1975JP-0052917

May 1, 1975

PATENT-FAMILY:

 PUB-NO
 PUB-DATE
 LANGUAGE
 PAGES
 MAIN-IPC

 JP 51129000 A
 November 10, 1976
 N/A
 000
 N/A

 JP 80002440 B
 January 19, 1980
 N/A
 000
 N/A

INT-CL (IPC): C07J 9/00

ABSTRACTED-PUB-NO: JP51129000A

BASIC-ABSTRACT:

To <u>rice bran oil</u> and/or rice embryo oil, 25-35% aq. alkali is added, at equal to or 5% below the acid value equiv. of the oils, to separate them into a first neutral oil phase contg. triglyceride as the major component, <u>oryzanol</u> and free steroid, and first foots phase contg. alkali salts of free fatty acids originating from the oils. Both phases are sepd. mutually.

To the first neutral oil phase, 3-10% aq. alkali is then added at 10-20% excess over the acid value equiv. of the oil and the amt sufficient to convert oryzanol in the first neutral oil phase to alkali salt. The second neutral oil phase contg. triglyceride as the major component and free steroid and second foots phase contg. alkali salt of oryzanol are formed.

After the sepn., the neutral oil is removed from the second foots phase, which is then heat-treated under 2-3 Kg/cm2 in the presence of 2.5-3 N aq. alkali wchih corresponds to about 10-fold amt. of the saponification equiv. of the second foots phase. The alkali salt in the second foots phase is then saponified, and the alkali salt of ferulic acid and free steroid are formed. Finally, the steroid is extracted with acetone.

Full Title Citation Front Review	Classification Date	Reference Claims	KVMC Image

50. Document ID: JP 51123811 A, JP 78005368 B

Entry 50 of 72

File: DWPI

Oct 28, 1976

DERWENT-ACC-NO: 1976-93358X

DERWENT-WEEK: 197650

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Concentrating and sepg. oryzanol from rice (germ or) bran oil - by adding alkali soln., sepg. out oryzanol alkali salt and hydrolysing

PRIORITY-DATA:

1975JP-0049005

April 22, 1975

PATENT-FAMILY:

PUB-NO PUB-DATE LANGUAGE PAGES MAIN-IPC JP 51123811 A October 28, 1976 N/A 000 N/A JP 78005368 B February 27, 1978 N/A 000 N/A

INT-CL (IPC): A61K 31/22; A61K 35/78; C07G 17/00

ABSTRACTED-PUB-NO: JP51123811A

BASIC-ABSTRACT:

Process comprises adding rice bran oil and/or rice germ oil with 25-35% aq. alkali soln. equivalent to <5% of acid value equivalent of the oil to give a 1st neutral oil layer contq. oryzanol and 1st bottoms layer contq alkali salt of free fatty acid derived from the oil material, separating the resultant 1st neutral oil layer adding oil layer to 3-10% aq alkali soln at 10-20% excess than acid value equivalent of the 1st neutral oil layer plus a quantity capable of alkali salt-formation with <u>oryzanol</u> to give a 2nd bottoms layer contg. <u>oryzanol</u> alkali salt and a 2nd neutral oil layer, separating the resultant the 2nd bottoms layer separating the small amt of neutral oil, salting-out to recover oryzanol alkali salt free from water; and hydrolysing the resultant alkali salt with acid to give oryzanol.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image

51. Document ID: JP 51029212 A

Entry 51 of 72

File: DWPI

Mar 12, 1976

DERWENT-ACC-NO: 1976-30981X

DERWENT-WEEK: 197617

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Treatment agent for Comedo - is mixt of viscous fractions obtd from rice

bran oil

PRIORITY-DATA:

1974JP-0099484

August 31, 1974

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 51029212 A

March 12, 1976

N/A

000

N/A

INT-CL (IPC): A61K 35/78

ABSTRACTED-PUB-NO: JP51029212A

BASIC-ABSTRACT:

The agent comprises mixt. of (a) dark oil obtained in the refining process of rice bran oil or its mono-alcohol ester, (b) fraction (bp. above 200 degrees C) obtained by molecular-distillation of rice bran oil, the dark oil or their mono-alcohol esteR, (c) alkaline oil scum, (d) the wax of rice bran, or (e) the gum of rice bran are extracted with methanol or alkaline methanol. When the materials are extracted with methanol, the methanol solution is concentrated and the viscous substances of rice bran oil are obtained. When the materials are extracted with alkaline methanol, the alkaline methanol solution is neutralized with an acid and its is concentrated and the viscous substances of rice bran oil are obtained. The material consisting of (a), (b), (d) and (e) is extracted with mixture solvent consisting of oryzanol-soluble mono-alcohol and oryzanol-insoluble mono-alcohol, and the extraction solution is concentrated.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KMC | Image

52. Document ID: JP 48004617 A

Entry 52 of 72

File: DWPI

DERWENT-ACC-NO: 1973-56995U

DERWENT-WEEK: 197339

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Oryzanol prodn - from alkali washings of rice bran oil

PRIORITY-DATA:

1971JP-0037981

June 2, 1971

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 48004617 A

N/A

000

N/A

ABSTRACTED-PUB-NO: JP48004617A BASIC-ABSTRACT:

Crude <u>rice bran oil</u> was washed with alkali and the ext. neutralised with crude or distd. fatty acids to isolate <u>oryzanol</u>.

Thus, 200 g of an alkali ext. in iso-PrOH was washed with hexane, heated with distd. fatty acids at 60 degrees, and extd. with hexane. Evapn. of the ext. gave 9 g crude oryzanol.

Full Title Citation Front Review Classification Date Reference Claims KWC Image

53. Document ID: JP 72002870 B

Entry 53 of 72 File: DWPI

DERWENT-ACC-NO: 1972-06610T

DERWENT-WEEK: 197204

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Crystalline oryzanol prodn - from rice germ oil and related prods

PRIORITY-DATA:

1966JP-0024566

November 22, 1966

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

N/A

JP 72002870 B N/A

INT-CL (IPC): A61K 0/00; B01D 0/00; C11C 0/00

ABSTRACTED-PUB-NO: JP72002870B

BASIC-ABSTRACT:

Process comprises adding less than 1.5 times amount of water or primary lower alkyl alcohol under stirring to the concd. <a href="organization-color: grand-organization-color: grand-organization-color

Full Title Citation Front Review Classification Date Reference Claims KWC Image

54. Document ID: JP 72033124 B

DERWENT-ACC-NO: 1972-55004T

DERWENT-WEEK: 197234

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Recovering oryzanol from alkali foots of rice bran oil

PRIORITY-DATA:

Entry 54 of 72

1970JP-0114244

December 21, 1970

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

File: DWPI

MAIN-IPC

JP 72033124 B

N/A

000

N/A

INT-CL (IPC): A61K 0/00; B01D 0/00; C07C 0/00; C11B 0/00

ABSTRACTED-PUB-NO: JP72033124B

BASIC-ABSTRACT:

Recovering <u>oryzanol</u> by dissolving alkali foots of <u>rice bran oil</u> in a water-soluble organic solvent, e.g. methanol, ethanol, propanol, acetone, etc., allowing sodium monophosphate, sodium dicitrate or EDTA-sodium salt to react with the soln. obtd. above to ppte. <u>oryzanol</u>, followed by collecting the thus-pptd. <u>oryzanol</u>. The purity of the <u>oryzanol</u> obtd. is 88-90%, and yield is is approx. 95% of the theoretical. Content of heavy metals is <10 ppm.

Full Title Citation Front Review Classification Date Reference Claims KWC Image

55. Document ID: JP 72033123 B

Entry 55 of 72

File: DWPI

DERWENT-ACC-NO: 1972-55003T

DERWENT-WEEK: 197234

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Recovering oryzanol - from alkali foots of rice bran oil

PRIORITY-DATA:

1970JP-0091988

October 21, 1970

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 72033123 B

N/A

000

N/A

INT-CL (IPC): A61K 0/00; B01D 0/00; C07C 0/00; C11B 0/00

ABSTRACTED-PUB-NO: JP72033123B

BASIC-ABSTRACT:

Oryzanol recovery is by adding a water-soluble organic solvent, e.g. methanol, propanol, acetone or the like, to the alkali foots of rice bran oil contg. liberating alkali, allowing a fatty acid constituting a conventional oil and fat to react therewith so that oryzanol in an amt. more than that required for neutralising liberated alkali and alkali to be combined with oryzanol in the alkali foots may be pptd., followed by collecting the thus pptd. oryzanol. The purity of the oryzanol obtd. is about 85%, and its yield is about 95% of teh theoretical value. The oryzanol may be further purified by, for example, recrystallisation in a conventional manner.

Full Title Citation Front Review Classification Date Reference Claims KMC Image

56. Document ID: JP 69023347 B

Entry 56 of 72

DERWENT-ACC-NO: 1967-08077H

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Solvent extn of oryzanol from alkaline solns

PRIORITY-DATA:

1967JP-0018798

March 28, 1967

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 69023347 B

N/A

000

N/A

ABSTRACTED-PUB-NO: JP69023347B BASIC-ABSTRACT:

Process for solvent extn. of <u>oryzanol</u> (I) from suitable source (e.g. <u>rice bran oil</u>, rice germ oil, oil cakes or waxes) wherein the soln. contng. (I) is adjusted to slightly alkaline and (I) is extd. using a mixt. of an aqs. immiscible organic solvent (e.g. n-hexane) and an aqs. miscible ketone (e.g. acetone, MEK etc.), int he presence of a large amt. of H2O or aqs. alcohol. The resultant extract is washed with an aqs. alkaline soln. and (I) is recovered from this alkaline soln.

(I) promotes growth and breeding in animals, is used in treatment of climacteric disorders, as a hypotensor and in dilation of peripheral blood vessels.

Oil cake used a source of (I) is lees or rice bran/germ refuse.

STERRITORN							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			2 ************************************
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMAC	Image

57. Document ID: JP 65017666 B

Entry 57 of 72

DERWENT-ACC-NO: 1967-03668G

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Oryzanol for ovarian dysfunction in livestock

PRIORITY-DATA:

1962JP-0015989

April 26, 1962

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 65017666 B

N/A

000

N/A

ABSTRACTED-PUB-NO: JP65017666B BASIC-ABSTRACT:

Treatment of ovarian dysfunction in animals, by the parenteral administrat ion of <u>oryzanol</u> up to 7 days prior to expected oestrus.

Obtained from <u>rice bran oil</u>, it has m.p. 137.5-8.0 deg.C., and u.v. maxima at 231, 291 and 316 mmu.

Oryzanol shows a hormone-like action by stimulating genital organ growth in female mice, and when used in the treatment of livestock it shows a high recovery rate with fewer side-effects than conventional hormone therapy, so long at it is not given during high corpus luteum activity.

Generally, daily does (mg) are: cow and horse, 50-150; sheep, 10-30; goat, 20-50. The substance is given in a suitable oil (cotton seed, olive) at a level of 50 mg/5-20 mls.

Dosing is arranged for the period from the sharp fall in corpus luteum hormone to the onset of oestrus; its frequency depends on the disease condition.

Full Title Citation Front Review Classification Date Reference Claims KWC Image

58. Document ID: JP 65015666 B

Entry 58 of 72

DERWENT-ACC-NO: 1967-03494G

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Water-soluble or yzanol

PRIORITY-DATA:

1963JP-0028084

May 30, 1963

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 65015666 B

N/A

000

N/A

ABSTRACTED-PUB-NO: JP65015666B BASIC-ABSTRACT:

Process for making <u>oryzanol</u> water soluble. <u>Oryzanol</u> is obtd. from <u>rice bran oil</u> and rice germ oil and is sol. in oils and fats on warming but insol. in water.

Animal growth promoting factor.

<u>Oryzanol</u> is esterified with mono or poly-basic acids or anhydrides or with partially esterified polybasic acids. This esterified <u>oryzanol</u> acts as a solubiliser for free <u>oryzanol</u> in the presence of a surface active agent.

Suitable esterifying monobasic acids are e.g. acetic, butyric, lauric, oleic.

Suitable polybasic acids and partial esters are succinic, adipic, citric and their anhydrides; monomethylsuccinate, monomethyl adipate, mono and dipropyl citrates.

With acid anhydrides, the mixt. of <u>oryzanol</u> and acid anhydride is heated at 100 deg. in the presence of a catalyst e.g. H2SO4.

With acids, a solvent is used with a catalyst.

Suitable surface active agents are non-ionic, anionic and cationic cpds. e.g. Tweens 20 and 80, polyoxyethyleneglycol oleates, Na salt of oleyl alcohol sulphuric acid ester.

Full Title Citation Front Review Classification Date Reference Claims KWC Image

59. Document ID: DE 1196321 A

Entry 59 of 72

DERWENT-ACC-NO: 1967-03251G

DERWENT-WEEK: 196801

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Y-oryzanol prodn

PRIORITY-DATA:

1962JP-0040926 1962JP-0040926 September 22, 1962

September 22, 1962

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

DE 1196321 A

N/A

000

N/A

ABSTRACTED-PUB-NO: DE 1196321A BASIC-ABSTRACT:

A process for the extraction of gamma-oryzanol from the alkaline dreg of rice bran oil.

For medicinal and dietetic purposes.

The alkaline dreg is treated with a lower alcohol e.g. MeOH, EtOH etc., either at room temp. or with heating, in order to remove as much water and soap as possible. The amount of solvent employed should be between 1 and 6 times the amount of dreg to be extracted. The residue from the above extraction is then extracted at room temp. with a lower alcohol contag. an alkali e.g. KOH, NaOH, Na2CO3, K2CO3 etc. The alcohol should be as dry as possible and not contain more than 10% H2O. The alkaline alcoholic soln. is then neutralised with a weak acid, e.g. acetic, to ppt. gamma-oryzanol of high purity

	****					***************************************
Full	Title Citation	Front Revie	ew Classification	Date Refe	rence Claims	KWC Image

60. Document ID: JP 69023347 B

Entry 60 of 72

DERWENT-ACC-NO: 1966-40425F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Solvent extn of oryzanol from alkaline solns

PRIORITY-DATA:

1967JP-0018798

March 28, 1967

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 69023347 B

N/A

000

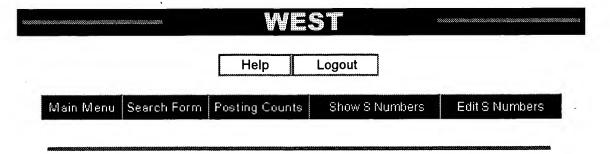
N/A

ABSTRACTED-PUB-NO: JP69023347B BASIC-ABSTRACT:

Process for solvent extn. of <u>oryzanol</u> (I) from suitable sources (e.g <u>rice bran oil</u>, rice germ oil, oil cakes or waxes) wherein the soln. contng. (I) is adjusted to slightly alkaline and (I) is extd. using a mixt. of an aqs. immiscible organic solvent (e.g n-hexane) and an aqs. miscible ketone (e.g acetone, MEK etc.), in the presence of a large amt. of H2O or aqs. alcohol. The resultant extract is washed with an aqs. alkaline soln. and (I) is recovered from this alkaline soln.

(I) promotes growth and breeding in animals, is used in treatment of climacteric disorders, as a hypotensor and in dilation of peripheral blood vessels.

Terms		Documen	ts
l and oryzanol			72
Display 20 Documents	including docum	ent number [61
D: 1 E			
<u>Display Format</u> : F	EV Change	Format	
Highlay Kormate i B	EV II Change	Format i	
<u>Display Format: [F</u>	EV Change	Format	



Search Results - Record(s) 61 through 72 of 72 returned.

61. Document ID: JP 69023344 B

Entry 61 of 72

File: DWPI

DERWENT-ACC-NO: 1966-40422F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Crystalline oryzanol from rice products

PRIORITY-DATA:

1966JP-0076605

November 22, 1966

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 69023344 B

N/A

000

N/A

ABSTRACTED-PUB-NO: JP69023344B BASIC-ABSTRACT:

Process for separation of <u>oryzanol</u> (I) from condensed molecular rice distillates (II) e.g rice germ oil, <u>rice bran oil</u>, rice bran dark oil, wherein a petroleum series hydrocarbon (III) and 1-20 (pref. 5%) (based on II) H2O or primary alkyl alcohol are added to (II) which contains (I) in conc. range 5-30%. The mixt. is vigorously stirred then cooled and (I) is selectively ppted, free from glyceride contamination.

Sepn. of (I) from glycerides in (II).

Full Title Citation Front Review Classification Date Reference Claims KWC Image	Full Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image
---	------------	----------	-------	--------	----------------	------	-----------	--------	------	-------

62. Document ID: JP 69001285 B

Entry 62 of 72

DERWENT-ACC-NO: 1966-36071F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Method for obtaining oryzanol growth promoting agent

PRIORITY-DATA:

1966JP-0001080

January 11, 1966

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 69001285 B

N/A

000

N/A

ABSTRACTED-PUB-NO: JP69001285B BASIC-ABSTRACT:

Method for the production of <u>oryzanol in which oryzanol</u>-contng. material (e.g. <u>rice bran oil</u>) is subjected to saponification with a soln. of an alkali hydroxide in a lower alcohol, the pptd. sterols are removed, and the mother liquor is applied to an anion exchange resin. The adsorbed <u>oryzanol</u> is then removed to give a pure crystalline product.

Growth promoting agent for animals.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KOMIC	Image

63. Document ID: JP 68027323 B

Entry 63 of 72

DERWENT-ACC-NO: 1966-35182F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD TITLE: Triterpene esters of ferulic acid

PRIORITY-DATA:

1965JP-0065839

October 27, 1965

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 68027323 B

N/A

. 000

N/A

ABSTRACTED-PUB-NO: JP68027323B

BASIC-ABSTRACT:

Separating triterpene esters of ferulic acid from rice bran oil.

The separation of the triterpene esters from the sterol esters is based on the difference in the ease of saponification of the two ester groups. The presence of a C4 Me group in the triterpene esters reduces the ease of saponification. <u>Oryzanol</u> in lower alcoholic soln. contg. alkalies is heated to saponify the sterol esters and the mixture is then acidified when the triterpene esters crystallise. The amount of alkali required for saponification is 1-3 mols per mol of sterol ester, the mol. wt. of which or of the <u>oryzanol</u> may be taken as 600. The alkali concn. is 0.1-1N and saponification is for 2-4 hrs.

***************************************									STATE OF THE PARTY OF THE PARTY.	
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KAMC	Image

54. Document ID: JP 68012731 B, FR 1526725 A, US 3470150 A

Entry 64 of 72

DERWENT-ACC-NO: 1966-32527F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Extraction of oryzanol from rice bran oil

PRIORITY-DATA:

1966JP-0076604

November 22, 1966

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 68012731 B		N/A	000	N/A
FR 1526725 A		N/A	000	N/A
US 3470150 A		N/A	000	N/A

ABSTRACTED-PUB-NO: JP68012731B BASIC-ABSTRACT:

Extraction of <u>oryzanol from rice bran oil</u>, by molecular distillation of the oil, followed by partitioning between a petroleum hydrocarbon and furfural.

Concd. <u>oryzanol</u> fraction (200 kg., contng. 20.2% <u>oryzanol</u>), obtained as a distillate at 280-300 deg.C. from molecular distillation of <u>rice bran oil</u>; dissolved in 1000 l. n-hexane and partitioned between the n-hexane and water satd. furfural in a Podbielniak liquid-liquid extractor. Furfural layer separated, steam distilled to recover 4/5 of the furfural. The concd. furfural soln. treated with 1/2 volume of water and mixture stirred vigorously. Pptd. crystals were filtered off and recryst. from n-hexane to give 13.4 kg. <u>oryzanol</u> of 98.3% purity.

THE CONTRACTOR OF THE PROPERTY OF THE PARTY					
Full Title Citation	Front Review	Classification Date	Reference Cla	ims KWC	Image

65. Document ID: JP 68012730 B

Entry 65 of 72

DERWENT-ACC-NO: 1966-32526F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Oryzanol from alkaline residues of rice bran oil

PRIORITY-DATA:

1966JP-0017374

March 10, 1966

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 68012730 B

N/A

000

N/A

ABSTRACTED-PUB-NO: JP68012730B

BASIC-ABSTRACT:

The prodn. of <u>oryzanol</u> (I) from alkaline residues of <u>rice bran oil</u> by adding a lower alc. to the residue passing through CO2 and collecting the crysts.

Higher yields over known processes.

MeOH and EtOH used as solvent. CO2 passed for 0.5-1.0 hr. under 3-1 ats. at 30-50 deg.C.

1 kg. Alkaline residue of <u>rice bran oil</u> (contng. 25% Na salt of fatty acids, 25% fat oil, waxes, phosphatides, Na salt of (I) and impurities and 50% H2O) was mixed with 2 l. MeOH and Co2 passed for 1 hr. at 40 deg.C. 30.3 g. of a yellow pdr. (85.1% (I)) was recovered. (Decompn. of the same alkaline residue with H2SO4 gave only 5.4% (I) as a dark oil).

	-									
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image

66. Document ID: JP 68012728 B

Entry 66 of 72

DERWENT-ACC-NO: 1966-32524F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Extraction from rice bran oil of a ferulic acid ester

PRIORITY-DATA:

1966JP-0011710

February 28, 1966

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 68012728 B

N/A

000

N/A

ABSTRACTED-PUB-NO: JP68012728B BASIC-ABSTRACT:

Extraction from rice bran oil of a ferulic acid ester of m.pt. > 160 deg.C.

The ester has excellent activity on autonomic nervous system.

The <u>rice bran oil</u> is extracted with alkali-MeOH (concn. of alkali < 1%), extract neutralised with dil. acid (e.g. acetic acid-alcohol). The ppte. which forms (contng. <u>oryzanol</u>) removed by filtration, filtrate made slightly acidic with formation of crystals. These crystals are then heated at 50-70 deg.C. with 0.1-1N alkali-alcohol reaction, mixture neutralised, and resulting ferulic acid ester crystals which form collected.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWAC	Image

67. Document ID: JP 68012725 B

Entry 67 of 72

DERWENT-ACC-NO: 1966-32521F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Oryzanol from alkaline oil residues of rice bran oil

PRIORITY-DATA:

1965JP-0054379

September 7, 1965

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 68012725 B

N/A

000

N/A

ABSTRACTED-PUB-NO: JP68012725B BASIC-ABSTRACT:

Prodn. of <u>oryzanol</u> (I) from alkaline oil residues of <u>rice bran oil</u> by extracting with a hydrophobic solvent to remove oils and waxes etc., then adding water to the residue, passing in CO2 and extrng. with a hydrophobic solvent, then sepng. the extract and evapng. to give (I).

Commercial method for producing (I) in good yield by simple process.

Initial extrn. with hydrocarbon solvent, trichloroethylene etc. to remove oils, fats, waxes, phosphatides, sterols and coloring matter. Residue agitated with water and CO2 passed in at 1-3 atmospheres, e.g. for 60-30 mins., then (I) extra. with solvent. Extractions at 0-50 deg. for best results.

Full Title Citation Front Review Classification Date Reference Claims KWIC Image

68. Document ID: FR 1514488 A

Entry 68 of 72

DERWENT-ACC-NO: 1966-32147F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Process for the preparation of oryzanol concentrate

PRIORITY-DATA:

1966FR-0014901

March 10, 1966

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

FR 1514488 A

N/A

000

N/A

ABSTRACTED-PUB-NO: FR 1514488A BASIC-ABSTRACT:

A process for prepg. a concentrate contg. <u>oryzanol</u> wherein bran oil or <u>rice bran oil</u> is subjected to molecular distln. and the fraction distlg. between 280-300 deg.C under 10-3-10-4 mm. Hg is collected.

Correction of abnormalities of the sexual cycle.

Full Title Citation Front Review Classification Date Reference Claims KMC Image

69. Document ID: JP 66013039 B, BE 680914 A, CH 470887 A, DE 1617557 A, FR 6394 M, GB 1134878 A, NL 6606501 A

Entry 69 of 72

DERWENT-ACC-NO: 1966-22400F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Stable oryzanol solution

PRIORITY-DATA:

1964JP-0057470

October 9, 1964

D	Δ	т	E.	דת	٦_	FA	M	TT	.v	

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 66013039 B		N/A	000	N/A
BE 680914 A		N/A	000	N/A
CH 470887 A		N/A	000	N/A
DE 1617557 A	April 1, 1971	N/A	000	N/A
FR 6394 M		N/A	000	N/A
GB 1134878 A		N/A	000	N/A
NL 6606501 A		N/A	000	N/A

INT-CL (IPC): A61K 0/00

ABSTRACTED-PUB-NO: JP66013039B

BASIC-ABSTRACT:

Process for preparing a soln. of <u>oryzanol</u> by dissolving <u>oryzanol</u> in an aliphatic acid ester of raffinose heated at a temp. higher than the softening point and dispersing the mixture in a suitable medium, i.e. water or alcohol.

One or more kinds of reductive sugars and their water-soluble metal complexes as auxiliary solubilizing agents may also be added before dispersion of the mixture.

Oryzanol is a compound which is present in rice bran oil and shows absorption maxima at 231, 291 and 315 m mu in n-heptane soln.

The aliphatic acid residue of the raffinose ester has 8-20 C atoms. The raffinose esters can be prepd. by mixing an aliphatic acid methyl ester and raffinose in dimethylformamide and subjecting the mixture to ester interchange in the presence of an alkali catalyst.

-									
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWMC Image
				11	0102231110		11010101100		

70. Document ID: JP 65021879 B, DE 1301002 A

Entry 70 of 72

DERWENT-ACC-NO: 1966-18578F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD TITLE: Water-solubilisation of oryzanol

PRIORITY-DATA:

1963JP-0002545

January 24, 1963

PATENT-FAMILY:

 PUB-NO
 PUB-DATE
 LANGUAGE
 PAGES
 MAIN-IPC

 JP 65021879 B
 N/A
 000
 N/A

 DE 1301002 A
 N/A
 000
 N/A

ABSTRACTED-PUB-NO: JP65021879B BASIC-ABSTRACT:

Method of water-solubilization of oryzanol.

Medicinal and cosmetic.

A small amount of neutral oil and a surface active agent (3-20 pts.) are added to <u>oryzanol</u> (1 pt.). Water is then added and the resultant mixture heated at 60-100 deg.C. Neutral oils used include purified <u>rice-bran oil</u>, olive oil, castor oil, etc. A non-ionic surface active agent is pref. employed but cationic or anionic agents may be used where more suitable for medicinal or cosmetic preps. S.A. agents used include the polyoxyethylenesorbitan esters of oleic and lauric acid. The resultant aqs. soln. is stable from -10 to 90 deg.C. and remains clear both on storage and on infinite dilution with water.

	·			,				***************************************		
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image

71. Document ID: JP 65017666 B

Entry 71 of 72

DERWENT-ACC-NO: 1966-17990F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Oryzanol for ovarian dysfunction in livestock

PRIORITY-DATA:

1962JP-0015989

April 26, 1962

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 65017666 B

N/A

000

N/A

ABSTRACTED-PUB-NO: JP65017666B BASIC-ABSTRACT:

Treatment of ovarian dysfunction in animals, by the parenteral administrat ion of <u>oryzanol</u> up to 7 days prior to expected oestrus.

Obtained from <u>rice bran oil</u>, it has m.p. 137.5 - 8.0 deg.C, and u.v. maxima at 231, 291 and 316 m mu.

<u>Oryzanol</u> shows a hormone-like action by stimulating genital organ growth in female mice, and when used in the treatment of livestock it shows a high recovery rate with fewer side-effects than conventional hormone therapy, so long as it is not given during high corpus luteum activity.

Full Title Citation Front Review Classification Date Reference Claims KWIC Image

72. Document ID: JP 65015666 B

Entry 72 of 72

File: DWPI

DERWENT-ACC-NO: 1966-17755F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Water-soluble or yzanol

PRIORITY-DATA:

1963JP-0028084

May 30, 1963

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 65015666 B

N/A

000

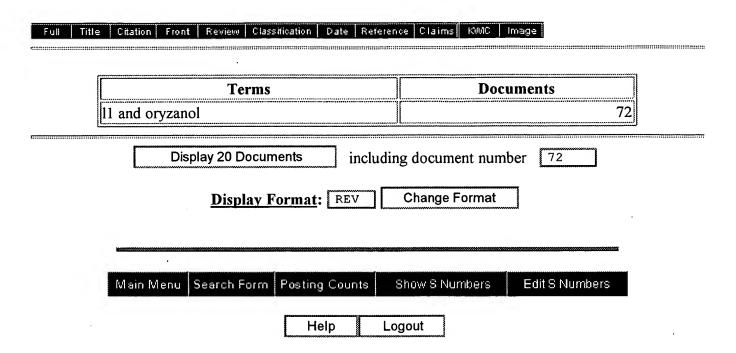
N/A

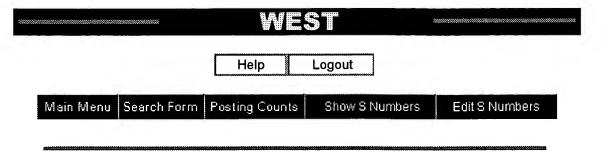
ABSTRACTED-PUB-NO: JP65015666B

BASIC-ABSTRACT:

Process for making <u>oryzanol</u> water soluble. <u>Oryzanol</u> is obtained from <u>rice bran oil</u> and rice germ oil and is sol. in oils and fats on warming but insol. in water.

Animal growth promoting factor.





Search Results - Record(s) 61 through 72 of 72 returned.

61. Document ID: JP 69023344 B

Entry 61 of 72

File: DWPI

N/A

000

DERWENT-ACC-NO: 1966-40422F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Crystalline oryzanol from rice products

PRIORITY-DATA:

1966JP-0076605 November 22, 1966

PATENT-FAMILY:

PUB-NO PUB-DATE LANGUAGE PAGES MAIN-IPC

JP 69023344 B N/A

ABSTRACTED-PUB-NO: JP69023344B

BASIC-ABSTRACT:

Process for separation of <u>oryzanol</u> (I) from condensed molecular rice distillates (II) e.g rice germ oil, <u>rice bran oil</u>, rice bran dark oil, wherein a petroleum series hydrocarbon (III) and 1-20 (pref. 5%) (based on II) H2O or primary alkyl alcohol are added to (II) which contains (I) in conc. range 5-30%. The mixt. is vigorously stirred then cooled and (I) is selectively ppted, free from glyceride contamination.

Sepn. of (I) from glycerides in (II).

Full Title Citation Front Review Classification Date Reference Claims KWC Image

62. Document ID: JP 69001285 B

Entry 62 of 72 File: DWPI

DERWENT-ACC-NO: 1966-36071F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Method for obtaining oryzanol growth promoting agent

PRIORITY-DATA:

1966JP-0001080

January 11, 1966

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 69001285 B

N/A

000

N/A

ABSTRACTED-PUB-NO: JP69001285B BASIC-ABSTRACT:

Method for the production of <u>oryzanol in which oryzanol</u>-contng. material (e.g. <u>rice bran oil</u>) is subjected to saponification with a soln. of an alkali hydroxide in a lower alcohol, the pptd. sterols are removed, and the mother liquor is applied to an anion exchange resin. The adsorbed <u>oryzanol</u> is then removed to give a pure crystalline product.

Growth promoting agent for animals.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	lmage

63. Document ID: JP 68027323 B

Entry 63 of 72

DERWENT-ACC-NO: 1966-35182F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD TITLE: Triterpene esters of ferulic acid

PRIORITY-DATA:

1965JP-0065839

October 27, 1965

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 68027323 B

N/A

000

N/A

ABSTRACTED-PUB-NO: JP68027323B BASIC-ABSTRACT:

Separating triterpene esters of ferulic acid from rice bran oil.

The separation of the triterpene esters from the sterol esters is based on the difference in the ease of saponification of the two ester groups. The presence of a C4 Me group in the triterpene esters reduces the ease of saponification. Oryzanol in lower alcoholic soln. contg. alkalies is heated to saponify the sterol esters and the mixture is then acidified when the triterpene esters crystallise. The amount of alkali required for saponification is 1-3 mols per mol of sterol ester, the mol. wt. of which or of the oryzanol may be taken as 600. The alkali concn. is 0.1-1N and saponification is for 2-4 hrs.

V			*****************					**********		
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KOME	Image

64. Document ID: JP 68012731 B, FR 1526725 A, US 3470150 A

Entry 64 of 72

DERWENT-ACC-NO: 1966-32527F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Extraction of oryzanol from rice bran oil

PRIORITY-DATA:

1966JP-0076604

November 22, 1966

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 68012731 B		N/A	000	N/A
FR 1526725 A		N/A	000	N/A
US 3470150 A		N/A	000	N/A

ABSTRACTED-PUB-NO: JP68012731B BASIC-ABSTRACT:

Extraction of <u>oryzanol from rice bran oil</u>, by molecular distillation of the oil, followed by partitioning between a petroleum hydrocarbon and furfural.

Concd. <u>oryzanol</u> fraction (200 kg., contng. 20.2% <u>oryzanol</u>), obtained as a distillate at 280-300 deg.C. from molecular distillation of <u>rice bran oil</u>; dissolved in 1000 l. n-hexane and partitioned between the n-hexane and water satd. furfural in a Podbielniak liquid-liquid extractor. Furfural layer separated, steam distilled to recover 4/5 of the furfural. The concd. furfural soln. treated with 1/2 volume of water and mixture stirred vigorously. Pptd. crystals were filtered off and recryst. from n-hexane to give 13.4 kg. <u>oryzanol</u> of 98.3% purity.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMIC	Image

65. Document ID: JP 68012730 B

Entry 65 of 72

DERWENT-ACC-NO: 1966-32526F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Oryzanol from alkaline residues of rice bran oil

PRIORITY-DATA:

1966JP-0017374

March 10, 1966

PATENT-FAMILY:

JP 68012730 B

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

N,

N/A

000

N/A

ABSTRACTED-PUB-NO: JP68012730B BASIC-ABSTRACT:

The prodn. of <u>oryzanol</u> (I) from alkaline residues of <u>rice bran oil</u> by adding a lower alc. to the residue passing through CO2 and collecting the crysts.

Higher yields over known processes.

MeOH and EtOH used as solvent. CO2 passed for 0.5-1.0 hr. under 3-1 ats. at 30-50 deg.C.

1 kg. Alkaline residue of <u>rice bran oil</u> (contng. 25% Na salt of fatty acids, 25% fat oil, waxes, phosphatides, Na salt of (I) and impurities and 50% H2O) was mixed with 2 l. MeOH and Co2 passed for 1 hr. at 40 deg.C. 30.3 g. of a yellow pdr. (85.1% (I)) was recovered. (Decompn. of the same alkaline residue with H2SO4 gave only 5.4% (I) as a dark oil).

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWC	Image

66. Document ID: JP 68012728 B

Entry 66 of 72

DERWENT-ACC-NO: 1966-32524F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Extraction from rice bran oil of a ferulic acid ester

PRIORITY-DATA:

1966JP-0011710

February 28, 1966

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 68012728 B

N/A

000

N/A

ABSTRACTED-PUB-NO: JP68012728B

BASIC-ABSTRACT:

Extraction from rice bran oil of a ferulic acid ester of m.pt. > 160 deg.C.

The ester has excellent activity on autonomic nervous system.

The <u>rice bran oil</u> is extracted with alkali-MeOH (concn. of alkali < 1%), extract neutralised with dil. acid (e.g. acetic acid-alcohol). The ppte. which forms (contng. <u>oryzanol</u>) removed by filtration, filtrate made slightly acidic with formation of crystals. These crystals are then heated at 50-70 deg.C. with 0.1-1N alkali-alcohol reaction, mixture neutralised, and resulting ferulic acid ester crystals which form collected.

*****		*********		,, ,		,				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWAC	Image

67. Document ID: JP 68012725 B

Entry 67 of 72

DERWENT-ACC-NO: 1966-32521F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Oryzanol from alkaline oil residues of rice bran oil

PRIORITY-DATA:

1965JP-0054379

September 7, 1965

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 68012725 B

N/A

000

N/A

ABSTRACTED-PUB-NO: JP68012725B BASIC-ABSTRACT:

Prodn. of <u>oryzanol</u> (I) from alkaline oil residues of <u>rice bran oil</u> by extracting with a hydrophobic solvent to remove oils and waxes etc., then adding water to the residue, passing in CO2 and extrng. with a hydrophobic solvent, then sepng. the extract and evapng. to give (I).

Commercial method for producing (I) in good yield by simple process.

Initial extrn. with hydrocarbon solvent, trichloroethylene etc. to remove oils, fats, waxes, phosphatides, sterols and coloring matter. Residue agitated with water and CO2 passed in at 1-3 atmospheres, e.g. for 60-30 mins., then (I) extra. with solvent. Extractions at 0-50 deg. for best results.

	*************	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				**************	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			***************************************
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image

68. Document ID: FR 1514488 A

Entry 68 of 72

DERWENT-ACC-NO: 1966-32147F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Process for the preparation of oryzanol concentrate

PRIORITY-DATA:

1966FR-0014901

March 10, 1966

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

FR 1514488 A

N/A

000

N/A

ABSTRACTED-PUB-NO: FR 1514488A BASIC-ABSTRACT:

A process for prepg. a concentrate contg. <u>oryzanol</u> wherein bran oil or <u>rice bran oil</u> is subjected to molecular distln. and the fraction distlg. between 280-300 deg.C under 10-3-10-4 mm. Hg is collected.

Correction of abnormalities of the sexual cycle.

i Tille I	L'itation I	Frant	E Baszicana I	Classification	Data :	Poteropea	I MANAC	instala i
 11112	CHARIVII	1 10111	I I S O I COO	CHASSIIIGANAII		mererence	I INDUIC :	nnage:

69. Document ID: JP 66013039 B, BE 680914 A, CH 470887 A, DE 1617557 A, FR 6394 M, GB 1134878 A, NL 6606501 A

Entry 69 of 72

DERWENT-ACC-NO: 1966-22400F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Stable oryzanol solution

PRIORITY-DATA:

1964JP-0057470

October 9, 1964

D)	ΔΨ	FN	ጥ-	FAM	ILLY:	

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 66013039 B	•	N/A	000	N/A
BE 680914 A		N/A	000	N/A
CH 470887 A		N/A	000	N/A
DE 1617557 A	April 1, 1971	N/A	000	N/A
FR 6394 M		N/A	000	N/A
GB 1134878 A		N/A	000	N/A
NL 6606501 A		N/A	000	N/A

INT-CL (IPC): A61K 0/00

ABSTRACTED-PUB-NO: JP66013039B

BASIC-ABSTRACT:

Process for preparing a soln. of <u>oryzanol</u> by dissolving <u>oryzanol</u> in an aliphatic acid ester of raffinose heated at a temp. higher than the softening point and dispersing the mixture in a suitable medium, i.e. water or alcohol.

One or more kinds of reductive sugars and their water-soluble metal complexes as auxiliary solubilizing agents may also be added before dispersion of the mixture.

Oryzanol is a compound which is present in <u>rice bran oil</u> and shows absorption maxima at 231, 291 and 315 m mu in n-heptane soln.

The aliphatic acid residue of the raffinose ester has 8-20 C atoms. The raffinose esters can be prepd. by mixing an aliphatic acid methyl ester and raffinose in dimethylformamide and subjecting the mixture to ester interchange in the presence of an alkali catalyst.

		ALEMAN MANAGEMENT AND						 ~~~	
C 11	T144 -	C 1 1 1		D	Classification	D 1	C /	 100000	
	1181€	: L. R. atton I	FIGURE	Review	I LIASSTICATION I	Date	Reference	an in his	metale ii
			, , , , , , , , , , , , , , , , , , , ,						

70. Document ID: JP 65021879 B, DE 1301002 A

Entry 70 of 72

DERWENT-ACC-NO: 1966-18578F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD TITLE: Water-solubilisation of oryzanol

PRIORITY-DATA:

1963JP-0002545

January 24, 1963

PATENT-FAMILY:

PUB-NO PUB-DATE

JP 65021879 B

DE 1301002 A

LANGUAGE N/A N/A PAGES MAIN-IPC 000 N/A

000

N/A N/A

ABSTRACTED-PUB-NO: JP65021879B BASIC-ABSTRACT:

Method of water-solubilization of oryzanol.

Medicinal and cosmetic.

A small amount of neutral oil and a surface active agent (3-20 pts.) are added to <u>oryzanol</u> (1 pt.). Water is then added and the resultant mixture heated at 60-100 deg.C. Neutral oils used include purified <u>rice-bran oil</u>, olive oil, castor oil, etc. A non-ionic surface active agent is pref. employed but cationic or anionic agents may be used where more suitable for medicinal or cosmetic preps. S.A. agents used include the polyoxyethylenesorbitan esters of oleic and lauric acid. The resultant aqs. soln. is stable from -10 to 90 deg.C. and remains clear both on storage and on infinite dilution with water.

					*****					····
Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Image

71. Document ID: JP 65017666 B

Entry 71 of 72

DERWENT-ACC-NO: 1966-17990F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Oryzanol for ovarian dysfunction in livestock

PRIORITY-DATA:

1962JP-0015989

April 26, 1962

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 65017666 B

N/A

000

N/A

ABSTRACTED-PUB-NO: JP65017666B BASIC-ABSTRACT:

Treatment of ovarian dysfunction in animals, by the parenteral administrat ion of <u>oryzanol</u> up to 7 days prior to expected oestrus.

Obtained from <u>rice bran oil</u>, it has m.p. 137.5 - 8.0 deg.C, and u.v. maxima at 231, 291 and 316 m mu.

<u>Oryzanol</u> shows a hormone-like action by stimulating genital organ growth in female mice, and when used in the treatment of livestock it shows a high recovery rate with fewer side-effects than conventional hormone therapy, so long as it is not given during high corpus luteum activity.

Full Title Citation Front Review Classification Date Reference Claims KWC Image

72. Document ID: JP 65015666 B

Entry 72 of 72

File: DWPI

DERWENT-ACC-NO: 1966-17755F

DERWENT-WEEK: 196800

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Water-soluble or yzanol

PRIORITY-DATA:

1963JP-0028084

May 30, 1963

PATENT-FAMILY:

PUB-NO

PUB-DATE

LANGUAGE

PAGES

MAIN-IPC

JP 65015666 B

N/A

000

N/A

ABSTRACTED-PUB-NO: JP65015666B

BASIC-ABSTRACT:

Process for making <u>oryzanol</u> water soluble. <u>Oryzanol</u> is obtained from <u>rice bran oil</u> and rice germ oil and is sol. in oils and fats on warming but insol. in water.

Animal growth promoting factor.

